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Early Doctor of Medicine and Doctor of Dental Dissertations with Contested Values of Creators

These manuscripts described as either an Inaugural Dissertation or an Inaugural Essay were presented to the University of Maryland for the Degree of Doctor of Medicine and/or Doctor of Dental during the years 1813 - 1877. The individual dissertations were bound together during the 1940's. The original order of contents for the bound volumes occasionally multiple errors in volumes' labels, title, and/or years. To address these issues, an additional "Corrected Table of Contents" has been inserted at the beginning of each volume.

The project team who investigated and corrected the values of contents were: Richard J. Holden, Digital Library Preservation Officer; Mindy Mikulajcak Parker, Metadata Management Librarian; Angela Cochrane and Ugo Shelley, Library Assistants; Sarah Hinds, Alex Jackson and Megan Wolff, Services Division.

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UNIVERSITY OF MARYLAND

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Hendrix, Henry A.	Oblique Inguinal Hernia[1]	(faded ink)
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1 Illegible in original.

HSHSL 2012 for the UM Digital Archive. Sources consulted for corrections: Original Dissertation; University of Maryland Medical Faculty, Matriculation List, 1821-1851; Cordell, Eugene F. "University of Maryland, 1807-1907" (New York : The Lewis Publishing Company, 1907), Volume 2.

UNIVERSITY OF MARYLAND

THESES

1855 (b)

Thompson, ~~R.~~ Kean R.	Delirium Tremens	24p.
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Buckley, ~~J.J.~~ Jesse James	Hydrocele	21p.
Hering, ~~E. A.~~ Edwin Augustus	Scarlatina	24p.
Johnson, ~~A. T.~~ Andrew J.	Mortification	25p.
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Brewer, Charles	Strabismus	27p.
Hunter, ~~J.~~ John H.	Epilepsy	16p.

An
Inaugural Desertation
on
Delirium Tremens

Submitted to examination
of the

Provost Regents
And
Faculty of Physic

of the
University of Maryland
For the degree
of
Doctor of Medicine
by
R. R. Thompson
of
Maryland

IMB
18910

No 1

Delirium tremens

This is a desease of the mental faculties characterised by a peculiar delirium caused a sudden suspension of the habitual use of some stimulus to which the brain has become accustomed.

This desease ~~desease~~ occurs only in those who are habitual drunkards, and who are addicted to the use of opium or any other narcotic stimulous. It is said that so long as the customary quantity of the stimulous is continued to be used the desease rarely supervenes, but, if from sickness or any thing else should cause the use of the stimulus to be suddenly abandoned entirly or greatly diminished, the activity of the brain becomes morbidly increased and mental disorder sets in. The most prominent symptoms are delirious hallucinations dread of impendin danger muscular

No 2

tremor and sleeplessness The name of delirium Tremens originated with Doctor Sutton from an account given of it by him in his publication of 1813. by which the attention of the profession was generally directed to this disease. Dr. Chapman also speaks of the stimulent plan of treatment, pursued by the Philadelphians upwards of a half a century ago It was called by him Mania a Potu in a paper published by him in 1820. I will now speak of the cause and symptoms of this disease according to my own experience together with what I have obtained from the observations of experienced authors.

It has been my lot and good fortune to be a resident student for a short time in the Baltimore Infirmary

in which place I had an opportunity of seeing several cases of this horrible disease

There was one case in particular to which my attention was directed on account of the suddenness of the attack and its peculiarities. One day last summer (of fifty four) while I was in the apothecary in the Anchorage of my aunties, a Sailor came to me for some thing to steady his nerves as he expressed it, which caused me to take more notice of him. I saw that his countenance bore rather a wild aspect, his hand was very tremulous. I gave him about two drams of the watery extract of Valerian which he readily drank, and not more than fifteen minutes afterwards I saw one of the other ~~of the~~ gentlemen of the house leading him down

stairs, furious with a paroxysm of mania a potu. It was an awful sight to see, man the noblest work of God - so fettered by a perverted appetite. I killed the poor fellow, but notwithstanding I could not help laughing at the poor wretch, for the manner in which he watched me, led me to believe that he thought I was his enemy and wished to hurt him, at the same time he was clinging to his protector.

The first symptoms of what is called simple delirium tremens, caused by the first withdrawal of the stimulous, is that of feeling of sinking of the whole system with a very great degree of anxiety which is apparent by the general appearance of the patient. If he should fall into a slight sleep he is suddenly startled up

by frightful dreams vague alarms
and great depressions of spirits
The patients sometimes seems as
if they are lost, and, sometimes they
seem to be endeavoring to find
out where they have gotten to
One morning I walked in the Ward
which I had under my charge
where there was a man laboring
under this calamity, I heard
him cry out all of a sudden,
I know where I am now; so
Curiosity led me to ask him
where he was, in order to hear
his reply; but he answered me
nothing, for he seemed to be in
a trance. I could not collect
sleep for his eyes were wide open
and he occasionally muttered
something to himself
I recollect another who came in

not long afterwards the was a man who followed the drug business and had been an excessive drinker for some time, and from some cause or other made up his mind that he left the South, to leave off drinking which caused an attack of this desease ~~brought back~~ ~~home~~ he become unmanageable almost, he imagined that there were immmerable little devils always sporting before his eyes, and a great many other queer things which none but a maniac could dare to imagine

It seems, that whilst a patient is labouring under this desease, during a paroxysm he is insensible to pain, for if they he is labouring under a fracture

or any other misfortune, & they do not seem to care fruit all for they mow about with impunity let what may be the consequencies.

The patient often imagines he sees most grotesque & frightful objects, little hobgoblins of all possible shapes and forms flying about his department, leering, leaping, threatening serpents, toads rats mice and various other horrible reptiles and vermin crawling over his bed. He sometimes imagines he is receiving money, immense amount of California gold I have seen them undergoing the motion of collecting it.

But of all the objects of delusion there is one striking feature of the delirium, which is relaxation wanting and that is, the patient

is always fearful, and each has some special object of terror which seem to attend him in all his movements. One person imagines he is pursued by a justice and an other flees from a creditor or an enemy and many other wild hallucinations, haunt his imagination.

The pulse of the patient affected with this disease varies considerably in different cases. In some it is hard and full and sometimes it is very frequent, but much more commonly it is full soft and quiet without strength or tension.

The skin generally retains its natural temperature & moisture. The tounge is coated generally with a white fur & is turnid. The bowels are torpid, appetite impaired some

times there is entire loathing of food; and thirst is considerable. There are often accidental affection complicated with this disease. For instance when the intemperate man is siezed with any malady or meets with any accident calculated to destroy his appetite for strong drink, the symptoms of delirium tremens, from the sudden suspension of the usual stimulous, is set up with those of the accidental disease which very materially complicates it. Delirium tremens is said some times to be the cause of death when it is complicated with some surgical injuries & it often increases the dangers of many other inflammatory diseases when it is a complication, such as pleurisy

No 10.

pneumonia gastritis et cetera.
The anatomical characters of this disease as presented by autopsical examinations except in complicated cases, has revealed but little in regard to the explanation of the symptoms of delirium tremens. Effusion of serum have been found in the ventricles, in the cavities of arachnoid and infiltrating the cerebral substance of the brain, besides these, cirrhosis, fatty degeneration, chronic inflammation of the liver & Bright's disease of the heart &c. may be found on dissection, but these are merely the results of long use of intoxicating articles rather than the cause of this disease. Post mortem examination on a case of simples delirium-

tremens is of rare occurence because death in the majority of cases is brought on by the complication peculiar to this disease, which we mentioned above.

Having noticed briefly the course symptoms, and some of the anatomical characters of this disease as found on dissection, I will now proceed to mention some of the essential causes.

One of the most essential causes of this diseases is the suspension of a stimulus to which the brain has become accustomed too. Tipplers who keep themselves constantly under a slight influence of the overjoyful without attaining to complete intoxication is said to be the most liable

to this Maledy.
The cause of Delirium tremens is not confined to the use of alcoholic drinks alone; The excessive opium eater and even the tobacco chewer sometimes falls a victim to it
Persons of sedentary habits are more easily affected by the stimulus than those of active life, because, vigorous exercise causes a portion of the stimulus to be expended in the various functions of life.
Dr Chapman states that he has seen the disease in all it hideous forms brought on by intemperate use of tobacco; but it seems as this form of the disease proceeds from sedation of the train

but can be abviated by the with drawal of the agent.
I may end what I have to say upon this part of my subject in a few words by stating, according to my own judgment, that any thing calculated to stimulate the brain above its normal standard and is withdrawn suddenly, may act as a cause of this disease.
I will now say a few words in regard to the Pathological Nature of this disease.
It is the opinion of authors that it has for its seat primarily and essentially in sensorium commune and that it is wholly independent of inflammatory or vascular turgescence of the organ.

But it seems to be merely a morbid activity of the brain caused by a sudden suspension of a stimulus by which its excitability had been long depressed.
Doct Wood says. Could we look into the interior operations of the brain, in delirium tremens we should see the springs of the organ everywhere relaxed, its machinery moving languidly and feebly; and the streams of its influence sent forth-se antly to their several destinations.
The brain in this condition seems to me, judging from what I've seen, to be struggling to regain it reasoning faculties, which belongs to it in its normal state, but often fails, hence arises the

the paroxisms peculiar to this affection, for instance
There was a man brought in the Infirmary who had been drinking, and on Wednesday February 1st. he was sitting quietly on his bed reading as any rational man would do it all of a sudden, without uttering a word jumped up rushed to the window made a spring against it breaking both glass and sash and would have gone head long down but stunned upon the pavement below had he not have been caught. There was a case where in reason was destroyed in an instant, showing this disease makes its attacks at the very seat of reason.
A correct view of this subject, says

professor Wood, is of practical importance; for the treatment depends upon it. If we believe the brain to be in a high state of irritation or inflammation, we shall be disposed to depletion; if in the contrary state, we shall deem it necessary to stimulate.
The diagnosis, of well marked cases of delirium tremens is quite easy. The affections with which it may possibly be confounded are febrile delirium meningitis and many forms of insanity. The signs which distinguishes insanity from this disease are as follows, the insane are less apt to see phantoms, or to be haunted with terror; less frequent atrophy with muscular tremor and much more persistent

The case in which a diagnosis would most difficult to be made would be where a case of real insanity supervened on a drunkard and had complicated the disease in question.

The delirium of fever is more incoherent than from drink, the fantastic hallucinations are not usually present, it is worst at its fears and tremors, but it is attended with greater muscular weakness and prostration.

There is a stage of typhoid fever to which the last stage of delirium tremens bears some resemblance but the previous history of the case is sufficient to determine the matter.

Acute meningitis has a stronger tendency to convulsions and coma.

greater violence of delirium more febrile disturbance; but is without the imaginary terrors and muscular trembling of the alcoholic disease.

In forming a diagnosis is very much aided by the previous habits of the patient.

Delirium tremens in its simple & uncomplicated form is not a dangerous disease, it generally subsides spontaneously, and under proper treatment always ends favorably. The patient sometimes destroyes himself; but the chief dangers of death from debility & exhaustion from muscular exertion. But when it is complicated with any high degree of inflammation of the brain, or occurs in the course of any serious disease endangering life cases often end in death.

Stupor, convulsions low muttering, subsultus, extreme frequency of pulse, a dry tongue & clammy skin is unfavorable. It is said a very few die with this desease in its early attacks, but each succeeding one becomes more dangerous because the occurrence debilitates constitutions. About one in little less than ten are with this desease.

The indications for treatment, according to the pathology of the case, is plain to Thom. The main object to be aimed at, is first to arouse the brain from that torpor and unconsciousness brought on by the sudden suspension of the accustomed stimulus. I think the most rational treatment to be pursued is to stimulate the brain to that standard to which it was before the withdrawal of the first cause, and then gradually withdraw it in order that the brain may become accustomed to it. But says, Prof Wood, if we use alcoholic drinks, a great moral consideration interpears. For this disease seems to be a punishment imposed upon man for his imprudence, in order to check him in his downward career, and thereby bring him to think upon his condition. And the medical man has not [illegible]

to sit in and obviate the provision of divine Providence, by reapplying the poison and thereby expose him again to that ruin to which he was fast hastening before. Because every dram the drunkard takes increases his love for the accursed beverage. Yet there are some cases in which we are compelled to resort to it. But, with few exceptions, this effect can be successfully treated by the Opium and its preperations. There are some cases of high state of excitement which requires the use of chloroform, in order to obviate its stupifying effects which use ether may be added. This agent proved efficacious in the hands of Prof Chico when all other things failed but I have seen it fail, it only increased the symtoms which were relieved by brandy. The condition of the organic functions should be attended to

Dr Stewart says according to his experience over case of this disease treated on the antiphlogistic treatment died Whilst those treated with stimulus and opiates get well.
Cupping under certain circumstances has proved useful, especially when applied to the neck temples or head in cases of sanguineous determination to the head.
Emetics, it is said deserves an attention as curative than any other treatment of cephalitis; but in very many cases it proves injurious rather than otherwise. Tartar emetic is objected to in this disease on account of the great amount it requires to bring on emesis, and causes so much sedation. This agent has found favor in the hands of some eminent men.

Cold affusions have been highly spoken of as proving quite efficacious. Dashing lepid water upon the patient has also been lauded by some. Besides what has been spoken of a great many other things have been used of which I have neither time nor space to mention.

When this disease occurs with its complications the treatment should be directed accordingly. Of all the various agents spoken of in the treatment of this affection opiates & stimulents are the only ones we can look upon as curatives in which we can place any very explicit confidence.

An
Inaugural dissertation
on
Compression of the brain
Submitted to the examination
of the
Provost, Regents and Faculty of Physic
of the
University of Maryland.
By
Rawson Smith
of
Virginia

Baltimore February 1855.

To the Faculty of the University of Maryland

In accordance with your requirements, and in common with the other candidates for the degree of M.D. I now attempt to write a thesis on a subject connected with medical science, However unsuccessful or imperfect that attempt may be I hope gentlemen that you will make due allowance - not only for my inexperience in expressing my views upon medical subjects, but also for my inexperience in practicing the healing art. The first thing presenting an obstacle of some magnitude to the mind of the student when sitting down to write his thesis, is the choice of a subject and I now find myself in a situation to fully appreciate the difficulty of concentrating my thoughts on any one subject. Diseases, injuries, and remedies crowd my mind. Science is not slow in advancing liberal contributions from her overflowing box of maladies, both in treating, and

important each one of which pass in quick succession through my mind and each from the fact of its interest and importance would seem to present equal claims for my most careful attention. Materia Medica with her thousand and one remedies, with open hand, and unmistakeable sincerity offers any one of her most precious gems upon which she has bestowed so much care and labour in collecting from the genial atmosphere of the hot house, or from the alpine regions of the uninhabitable portions of the globe, But a due appreciation of correct Therapeutical application also the many theories advanced by different authors in regard to the classification, and effects of the same remedy, can only be satisfactorily settled in the mind by observation at the bedside.

Surgery with the scalpel and bistouri in one hand, and the lancet in the other at first sight presents

a most formidable appearance but upon better acquaintance it presents a broad field for practical thoughts and facts and probably less room for doubt as to the proper indications for treatment, and at the same time less covering for the empiric. The formidable appearance presented by surgery is to be attributed to the knife, but I think the idea that surgery, and the knife are in every instance, inseparable, is too prevalent, I might say fashionable, not only with the people at large but I regret to say with the profession, and I have been strengthened in this conviction by witnessing the practice of our able Professor of Surgery during the last session. The young surgeon is especially prone to abuse the use of this most useful and efficient instrument. The desire for skill and fame renders the temptation doubly strong but he should remember the golden

rule do unto others as he would be done by, and remember that forbearance not infrequently contributes as much to the skill of the surgeon as does the use of the knife, lastly he should never loose sight of humanity for the sake of self aggrandizement.
I before remarked that the duty of the surgeon, seems to me more clearly defined, than that of the practitioner or therapeutist, I therefore select as the subject of my thesis, and present for your inspection a short article on

Compression of the brain

Here the course to be pursued by the surgeon is generally indicated by the circumstances which present in respective cases, yet after bringing into requisition his art and skill and learning, demanding prompt[illegible] of action, fortitude, and decision. We are always gratified when we judge

the opposed resisting the vital principle, especially when life is at stake, and in these cases the surgeon will often have occasion to watch with deep interest the vital powers struggling with great efforts, to overthrow that mortal destroyer disease, in order that they may resume their wonted power in the inward, and outward man, but he too often finds those efforts unavailing, here by timely, and well directed aid to those vital powers the skillful surgeon will often triumph, while on the other hand his utmost skill will prove unsuccessful in too many cases.

The brain is the most sensitive part of the whole organism, and one of the most important to life. Its situation renders it very liable to violence, and injuries, yet nature has made wise provision for its protection. The bones of the skull form a perfect case well adapted to its

form, and surrounding it on every side hard force and so shaped that it is well calculated to resist violence, its convexity being on the outside. The skull is incapable of yielding to any force or pressure unless it be sufficient to effect a fracture. There are three distinct membranes investing the brain. The dura mater a strong fibrous membrane is attached to the internal surface of the cranium, and sends processes inward for the support, and protection of the brain. The tentorium is attached to the margin of the petrous portion of the temporal bone, and supports the posterior lobes of the cerebrum which would otherwise press upon the cerebellum. The arachnoid membrane is a serous sac enveloping the brain and is reflected on the inner surface of the dura-mater. The pia mater is composed principally of blood vessels

held together by a layer of areola tissue. This membrane is very extensive, sending processes between the convolutions, and into the third, and fourth ventricles.
The substance of the brain is soft but is said to be incompressible, though very easily lacerated, yet we do sometimes see symptoms of compression, with extravasation, without there being necessarily very serious lesion of of the organ. This would seem inconsistent with the assertion just made, that the substance of the brain, and its inveloping case are incapable of yielding. If the substance of the brain cannot be compressed into a smaller bulk how is it possible for the bone to be depressed to the smallest extent without at the same time disorganizing that organ to a proportionate extent. We find a very plausible explanation how this can be effected from a knowledge of the fact

that the blood constitutes about one third of the bulk of the encephalon, and it has been estimated that about one sixth of all the blood in the system passes through that organ. This being the case we can readily perceive how under certain circumstances the blood in greater or less quantity may be expelled from, or prevented entering the vessels of the cranium thus rendering the cavity less full than it ordinarily is, without necessarily diminishing the size of the brain.

Compression of the brain may result from three causes, 1st it may be caused by fracture of the skull with depression of a portion of bone which is driven in by the same force which effected the fracture 2nd it may result from extravasation of blood or serum, which may be poured out from a ruptured vessel, or may exude through their walls. 3rd compression or

may be caused by formation of pus the result of inflammation of the brain or its membranes. Blood or pus may be seated in one or more of five different portions of the encephalon. 1st the seat of the effusion may be between the bone and dura mater, 2nd between the dura mater and arachnoid 3rd between the arachnoid and pia mater. 4th into the substance of the brain, and 5th the effusion may be in the ventricles. It has been the endeavour of some surgeons to classify the symptoms of compression according to the seat of the effusion, but this seems to me to be of very little practical importance and very nice discrimination, for any one, or all of the symptoms may not often do supervene from effusion in any one of the above mentioned seats. The surgeon can rarely if ever say whether

the effusion be seated in the substance of the brain or between its membranes nor can he determine at what point in relations to the external parts the extravasated fluid is sealed. If its seat could be certainly defined to be between the bone, and dura mater, and the exact point, we might, by making an opening through the bone with the trephine, give exit to the offending fluid and thus sometimes relieve the brain. Symptoms. The first effect of a blow on the head—for this is perhaps the most frequent cause of compression with which the surgeon has to deal—is more or less concussion, the shock communicated to the nervous centre to use a popular expression the patient is stunned by the blow He falls down unconscious, perhaps he may be aroused and made to answer questions, but immediately relapses into a state of insensibility. This surgeon

is cold, pulse is frequent and feeble and the pupils often contracted. If the shock has been slight these symptoms may soon pass off, but the patient is often left drowsy and languid, which may result in perfect recovery, but frequently, especially if the shock was severe the languor, and stupidity increase, volition is slowly performed the ideas become more confused and the patient gradually sinks as it were into a profound sleep from which he can not be aroused but is insensible and motionless. The pulse is full, slow, and laboring. The pupils are generally dilated and insensible to light. The pupil is immovable because the brain is incapable of receiving impressions from without made the nerves, voluntary motion is absent because the brain is incapable of exercising the function of volition. The bladder and rectum are not emptied in con-

sequence of paralysis of the muscles concerned in those functions. Stertorous breathing is a very common symptom the explanation of which is paralysis of the soft palate, which hangs loosely in the pharynx flapping against the parts adjacent in the efforts to breathe the face is flushed, in short the symptoms are those of apoplexy. If the effusion of blood is very rapid the symptoms of compression may supervene so soon that we are unable to observe the change from concussion, which is always the immediate effect of the injury, to compression which results from effusion and is generally not observed until the elapse of a longer or shorter period of time.

The effects of compression. There may be paralysis of one or both sides—most frequently of both sides. The whole organism is more or less impaired from the want of its accustomed

nervous influence from the brain. The lungs which are under the control of that organ suffer. The important function of respiration which they perform becomes embarrassed, in consequence of which the blood is improperly arterialized. Thus are materially complicating the injury sustained by the system. The action of the heart though not directly under the control of the brain becomes slow and weak, in consequence of not receiving its due amount of healthy blood from the lungs which is its natural stimulus. The blood being retarded in its progress through the lungs, I should think that the right side of the heart would be found engorged and thus give rise to dropsy. The usual mode of death is by coma.

Diagnosis. The diagnosis of compression is not generally very difficult, though it is sometimes difficult to distinguish it from concussion. The symptoms of concussion always follow immediately

after the injury is inflicted whereas those of compression especially if it result from extravasation, may and often do not supervene until the immediate effect of the shock has passed off. Mr. Pott is of the opinion "that it is impossible to say whether the first insensibility be the result of concussion or compression but that after the first effects have been removed spontaneously or by proper remedial means, if a second state of unconsciousness or stupefaction follows then we may be certain that the patient is labouring under compression."
If the skull has been fractured, and the bone depressed we may then conclude that there is at least some degree of compression from the first. The pupils present a different appearance, they are frequently contracted in concussion, but are generally fixed and dilated in compression and insensible to light. In the former state the pulse is feeble and sometimes

intermittent, while in the latter it is full slow, and often laboring, with hot skin often perspiring, face congested and stertorous breathing which is rarely seen in compression but always in simple concussion. With syncope it can hardly be confounded, the character of the pulse and appearance of the patient being materially different.

Prognosis. The termination and course of these cases are always very uncertain. The slightest lesions of the brain may be followed by the most unfavourable result yet we sometimes observe perfect recovery after extensive injury. Indeed although the symptoms may be relieved, yet there is always more or less danger of inflammation of a mostfatal, and dangerous character. The patient may never regain his consciousness but die from the first effect of the blow before reaction is established. But recovery should never be despaired of as long as there is life

Treatment: If the patient has been struck down by a blow on the head, and the surgeon finds him in a state of unconsciousness, it is very important that a correct diagnosis be made in order that he may pursue the proper treatment. The first duty is to institute a minute examination to discover fracture, if it exist. If this is found to be the case, and the bone is depressed, it should be elevated in order that the brain may be relieved from pressure. Should any fragments be found detached, they should be cautiously removed for if they remain their vitality will be lost and act as a source of irritation. Sometimes most difficulty will be experienced in elevating the depressed bone and it may become necessary to use the trephine to enable us to have more ready access to the depressed portion of bone and remove loose fragments with the least possible injury to the membranes of the brain. But according to the teaching of our

professor of surgery and I believe it corresponds with the opinion of most modern surgeons, the trephine should be used only as a last resort, but when necessary it should be promptly applied as the only means of relief. By the older surgeons the trephine was used in almost every case of this kind, but is at present comparatively little used. The objections to it are that it complicates the injury it is unavoidably a rough operation and very liable to inflict injury to the dura mater, especially when performed by an inexperienced hand thus increasing the chances for inflam mation. The instrument should be applied to a firm portion of bone as it is liable to produce injury or irritation. It is sometimes difficult to determine the existence of fracture, and there is one source of fallacy spoken of in works on surgery which is very apt to mislead the practitioner, and should be borne in mind when making

an examination of this kind. Even the blow has been inflicted with an obtuse or a flat body, the part struck loses its vitality in a measure, lymph is poured out in the surrounding parts which become swollen and hard, with abrupt edges around the part which was pulpified by the blow and remains depressed presenting the appearance of a depressed fragment of bone, after this the patient should be kept quiet, on a low diet. If symptoms of inflammation arrise antiphlogistic treatment will be appropriate, if the vital powers begin to flag it will be necessary to support the strength. When compression is the result of extravasation, the indications for treatment are to avert inflammation and to effect the absorption of the effused fluid. The principal remedies are venesection, mercury, and purgatives. Venesection in these cases is the dangerous shot anchor If used early it may avert inflammation and if it has been created, bleeding is the best

means for subduing it, bleeding also aides absorption, by rendering the blood vessels less full, and prepares the system for the action of other remedies. Mercury is highly efficient from its known power of bridling the effects of inflammation it prevents the effusion of coagulable lymph and promotes absorption calomel or blue pill in small and repeated doses so as to slightly affect the system will be appropriate Relief, purgatives will often prove useful, they act as revulsives tending to determine the blood from the head, cold water dressings applied are often highly useful when there is active inflammation. All sources of irritation should be removed and the patient kept perfectly quiet with bland and unstimulating diet. By persevering in a judicious treatment the surgeon may be the means of saving many valuable lives.

An

Inaugural Dissertation

on

Cholera

Submitted to the consideration

of the

President Regents and Faculty of Pharmacy

of the

University of Maryland

for the

Degree of Doctor in Pharmacy

By

Elizabeth Stringfellow

of

Maryland.

[illegible] without the ceremony of introduction, the subject which our little page announces to us is one so universally common and with which every one is so personally familiar that any general description will justly be regarded as superfluous. This knowledge is probable only as regards the disease. The name which should be the "open sesame" to the nature of the disease proves only a "Shiboleth" to the semiprofessional. The naming of medical subjects was intended by the wise founders of the art as an assistant to the student, as a reminder of the [illegible] short hand and it is advised to be compounded, & the name of the discoverer to be appended, a perpetual honor to a newly revealed truth. Though equally correct in both intentions seem-

doomed to an unfortunate result. The names of discoverers or, not to speak irreverently, quassidiscoverers, by their increasing numbers are likely to impede the art they were so rewarded for advancing. And this confounding of names has afforded a hobby for shallow brained disputants to waste time, paper and patience upon, and for wordy unscrupulous authors to palm worthless volumes upon the profession, adding unnecessary labour to the student, who is compelled to grope among the mass for truths borrowed if not stolen from honest unassuming authors more than all it appears to be this very thing which has originated the common but singular propensity for hunting titles instead of indications.

Coryza as a name derived

from the Greek and the words Kogus the head and sew I boil. It has some ten or twelve other equally applicable, but could scarcely receive honor from humble mention here. As custom demands it we add another Schneiditis, which though not perhaps so euphonious bears the equal merit, appropriateness.

Coryza at its onset is indicated by the slight tickling or pricking sensations which prompt the phenomenon denominated sneezing, or more or less severe burning sensations are felt and these are subsequently accompanied and followed by a free discharge of thin mucous. This and the sneezing are nature's effort and method of relieving the symptoms and this known as the incipient

stage of inflammation or that of irritation. In these symptoms now giving way and others succeed. The cause still acting in spite of the ordinary forces for resisting it new and more general attempts are made to get rid of it. The vital current is directed to extreme circulation is increased the capillary vessels become distended with blood and crowd upon the mucous secretories deranging their action and shutting their follicles, all the innumerable little vessels forming the Schneiderian membrane are engorged. This producing again redness irritation and we have as the result a hot dry surface, the part painful and with a feeling of fullness increasing until the opposite surfaces come in contact and the head is stopped up, with

is a new discharge the very common and characteristic symptom of the disease. The disordered mucipareous glands still striving to perform their functions secrete a thin acrid fluid which adds another irritant to the already goaded parts, it runs from the nostrils over the upper lip excoriating every part with which it comes in contact. These symptoms usually last sometime finally leaving with a watery disappearing, the skin and becomes thick, mild, and pearloid, concluding the second or inflammatory stage of the disease. Redness and suffusion of the eyes usually comes on with the second symptoms and remains throughout the disease. The constitution sometimes sympathizes and becomes en-

in my severe cases preceded by a rigor, with languor and great tenderness of the muscles generally, a hot dry skin, full pulse and headache. Headache may be caused by local disease, the mucous membrane, lining the nostrils, is continued into the lining of sinuses communicating with the nostrils, these becoming affected by purulent inflammation into them give rise to headache in the frontal sinus, and pain and oedema of the cheek when the antrum, affection in those parts give rise to other symptoms as when the patient has lain down if he turn to the right or left side a copious discharge is poured into the nostril from the opposite surface, or if the patient lie recumbent awhile the discharge

rising a flow of fluid into the vestibule is experienced. The former occurrence is caused by a sudden gush from either antrum and the latter from the frontal sinuses, in both cases favoured by position. The sense of smell is of course lost and less frequently and frequently by that of taste. The voice retains the nasal tone and the hearing is impaired from closure more or less complete, by swelling, of the nasal orrifice of the eustachian tube. In most cases the symptoms are mild, without fever, not disturbing any function or interrupting the business or pleasures of life and very rarely demanding the intervention of art.

The conditions of affairs above related lasts usually from

four to six days is so changed by prompt and proper action of remedies, that as the symptoms disappear except perhaps the secretion which has become thick and pus-like. This change is always a favourable symptom and indicates the return of health.

If the complaint does not end so, it becomes chronic in its simple form or is changed into the most intractable of all diseases known. Or what is more common it produces or complicates with others of a similar class of the diseases of the respiratory passages, Bronchitis, Bronchitis catarrhal and passes unnoticed along with their more dangerous manifestations.

Such are the ordinary and

most constant symptoms of acute coryza. And though all are perhaps never present in any case yet a sufficient number occur to facilitate a diagnosis. It varies in different circumstances, the different forms, acute or subacute, and the usual types sthenic and asthenic of other inflammatory diseases.

The chronic form may exist as such having all the more important symptoms of the acute from the commencement especially the thin watery fluid secretion of the nasal. It is more frequently asthenic though sometimes the disease persists for weeks with a strongly marked sthenic character. Chronic coryza lasts commonly from two or three weeks to a month but occasion-

time even a year.

Sometimes the complaint exhibits a tendency to recur periodically, once a year or oftener and with equal intervals, without any reference to the usual causes.

Hence from both classes of causes the exciting and predisposing ally together in producing an attack. One set operating bring on the requisite atonic enfeebled condition of the system, while the other excites the disease symptoms. Of the predisposing causes the most common are hereditary, previous febrile or inflammatory diseases or a congenital or habitual disposition may exist. Anyone indeed in whom is added the mobility of the capillary circulatories more particularly

is liable to the disease. Temperature is the most common of this class. Long continued cold which excites the circulation above the ordinary standard, especially the superficial circulation, renders those exposed to sudden and great changes either of the external atmosphere or that of apartments prone to the disease. On the contrary those ~~exposed~~ confined for a long time to close warm rooms or accustomed to warm weather the exciting cause to provoke an attack. All those diseases which produce general debility act in the same way as warmth, with this difference. The health lowering, the reservoir force is destroyed by them, whereas warmth stimu-

ceding the necessity for its action only causes its activity to be suspended. Some cases of congenital debility occur which render such systems constantly obnoxious to this and many other diseases. Sometimes a peculiar predisposition is present where the complaint is induced from exposure to an ordinary or usual exciting cause. The predisposing causes are incapable of producing an attack unassisted, they merely continued and are necessary to assist it.

The exciting causes form a very considerable class. For besides those which are only efficient in predisposed systems, there are many others which by their power

ful irritant properties are capable of producing inflammation in any tissue or part though perfectly healthy, by simple contact. Such are irritating powders. The dust raised in the machine from threshing wheat is a very common cause in the country, probably because it is assisted by excitement and exhaustion of labour. Many vesicating powders are familiar to the chemist; acrid vapours and corroding liquids as acids, accidental attacks are sufficiently numerous, in the laboratory, among the mechanic arts and husbandry. These are of course assisted by a predisposition. Among exciting, as among the predisposing, none are so frequent as relative temperature. It acts in all its variety of ways, and

as a stimulant and astringent and warmth as a tissue relaxant. Cold operating in both ways at the same time may produce this pathological result without the predisposition concurring. As a stimulant it acts upon the nasal mucous surface as an astringent upon the cutis, generally some part not habituated to its impression as the back of the head and neck; and perhaps the scanty distribution of nerves to this region permitting the greater encroachment of cold has some share in the explanation. The most frequent cooperating predisposing causes are those of previous enfeebling disease and warmth. Cold cannot act as an excitant and predisponent cause at the same time; in

order to obtain its stimulant effects it must only be briefly applied, for its stimulant properties depend upon the reaction which follows its sedative impression, and if it be continued too long reaction will not follow. As an astringent it prevents the usual exhalations of the skin, drives and the capillary circulation, drives the blood internally promoting internal congestion, and increasing to embarrassment, the duty of mucous surfaces, whose place it is to assist or supercede the skin in its offices. Consequently persons, though in perfect health, are frequently affected by sitting, with the back or back of the neck exposed to draughts of cold and damp air. Warmth can only excite the operation of the spasmodic - posing specific cause resists.

unless the heat be sufficient if inspired to directly destroy the local vitality, as in the inhalation of flame or steam. Where continued exposure to a certain degree of cold has at length raised the superficial circulation higher than ordinary to resist its depressing influence, any sudden and great succession of warmth, so speedily relaxes the ~~previous rapid flow~~ energy of the capillaries exhausted by the late state of tension as not to allow time for the previous rapid flow of blood to accumulate itself to the new condition, passive congestion ensues and finally if the causes be sufficiently intense inflammation, of course ensues. The and high sensitive superficies and the superficial parts are

more copiously supplied than the seat of our complaint. So the two causes are opposite in their action as in their condition. Cold is the exciting cause when rose-rash predisposes and vice versa.

Some cause, supposed to be the odor of grass or hay is sometimes present during hay-making, which excites violent and obstinate coryza. Whatever the cause, and it does not seem to be present either everywhere or any one, it is probably favored by that state of system which warmth and high labor induce. It may be avoided or prevented by upon the corn stalk or cotton which is spurred up and only in favoring seasons; and which being cut down before

it is matured thus revenges its death. The usually epidemic nature of the disease will permit this opinion, and its occasional sporadic attacks rather supports it than otherwise.

Moisture may be considered a cause or more properly an adjunct cause to cold, so wet feet or clothes exposure to wet weather make use of the attack far more frequent and certain. It acts by its power of radiating heat thus facilitating the rapid variations of temperature which without its aid might prove inefficient. The hygrometrical condition of the Schneidrian membrane constitutes a predisposing cause.

Notwithstanding the large majority of cases which prove without any bad effects resulting

in a few cases it is followed by lesions which are pernicious. There are various cavities which open into the nostrils and when inflamed along with are only a part of the affection if recovery in all takes place at the same time; but sometimes the mucous membrane continued through the foramen with that which lines the cavity or sinus becomes thickened or denuded, closing the outlet and preventing the secretion from natural in quantity and quality from being discharged. The cavity becoming stuffed finally suppurates giving great pain and annoyance to the patient. Suppuration is caused both by the pressure and death of the fluid. Coryza is by some supposed to produce inflammation in the other respiratory passages

extension, this however seems to be very improbable. If it be thus propagated by extension why does it not first attack interposed organs, such as pharyngitis, instead of passing over into the trachea directly? If it does ever act so it must be admitted that the common cause assists at least the rare condition. Coryza prevents infants from sucking by obstructing the passage of air through the nose compelling the child to breathe through the mouth; the physiological condition of sucking requires this orifice to be airtight too and so the supply is entirely cut off. The child is said by its violent efforts to suck and breathe, to be thrown into convulsions and death has been known to result.

A diagnosis is attended with no difficulty as the disease is sufficiently singular in all its diversities to be distinguishable with ease. The prognosis is always favourable if it terminate otherwise it is an exception to a very constant rule yet such a fatal termination will sometimes ensue. Its sequelae are not as rare as is death.

From the variety of causes the treatment might justly be expected to be equally so, and in the inception of the disease which the physician rarely sees it might be necessary, as the cause has ceased to operate, to treat its indications; to apply an antidote for a poison, to stimulate passively yielding surfaces to soothe the heart by sympathetic irritation to protect it if

morbidly sensitive from exposure to irritating causes. But cases are very seldom seen untill the stage of congestion and much more commonly that of inflammation ensues. When seen in the stage of congestion, in order to lessen sensibility and thereby to secure irritability an opiate should be given for this purpose a half grain of Morphia or a proportionate amount of opium or its other preparation should be given. If the congestion be active and sthenic it should be treated by local sedatives as the inhalation of the vapours of Camphor if passive by astringents, water of vinegar will answer. Besides these derivatives — hot and stimulant pediluvia should be used in either condition if one

more energetic be called for, more likely in such cases, apply rubefacients to the back of the neck as mustard, or oil of turpentine, or croton oil, and for greater action still add cups or leeches in the same region. Some brisk purgative is very often of no slight efficacy and is applicable in many cases. In cases of strongly sthenic habit and where the inflammatory proclivity exists it will admit of or even demand depletion. Very few cases occur in which the indications call for so energetic measures so early and never unless some dangerous complication threaten, or previous attacks warn us of their severity to rush even incipient symptoms, before the disease has gone on to be established and is then less under our control.

After the inflammation stage is begun or almost after the dry stage and this is most like too late, the treatment should be modified. This is the time to abstain when the patient is first seen and then the indicated remedies should commence the course. The thin discharge is gone or the nostril is dry and having the symptoms general those of ordinary inflammation anywhere else, and the constitutional treatment is also that is indicated for any similar condition. Take Restricted diet, mild and moving some prompt cathartic and the prescription as the symptoms are spread from the mild to the severe, a brisk purge or relaxation dose of castor oil, or Epsom

patients local or general depletion. Local depletion is not absolute but only relative, and is to be aided by the local or general revulsion. The cases demanding venesection are few and antimony seldom efficacious. These are only called for in peculiar cases or permitted by the medical system. In the majority of patients the most confidential or trustworthy remedy is the large anodyne at bed time and its concomitants the poppy & colchicum for the purpose of resolution steady and not abortive. The opiate will allay local irritation, keep the endodermic inflammation in subjection, quiet the gastric mucous surface and give time for the engorged capillaries to empty themselves and regain their normal tonicity. Febrile symptoms are often present or arise to be treated

with rigors, and the treatment generally is the same, as when no fever is present, but more so. When a tendency is manifested to the brain it should be opposed and proper added for its relief and then constitutional effects. When the disease arises from a peculiar exciting cause as the fever itself, the constitution is always feeble and tonics must be instituted. If the disease be that denominated typhus, with the best treatment may be hours in frequent diaphoretics &c. Sometimes cases occur in which in the acute symptoms continue for two or three weeks without remission a thorough fever and prostration with rash &c. Cases occur where after the

antiphlogistic and other remedies have been exhausted, a return to generous diet and healthy exercise will quickly cure. Where it prevents its trouble in the case of sucking children, they should be weaned and not permitted not to attempt to suck. The periodic form must be treated and will yield promptly to sulphate of quinine. In the pseudo membranous form medicinally seen in children, both cauterization and phlogistic treatment should be assisted more by constitutional doses, where the symptoms are severe and seems likely to end in this manner.

In those patients, in the constitution is in a state predisposed from previous causes, the mildest means are applicable, the cautious and diuretic

agents are decidedly contraindicated [illegible]
[illegible], and the pulse [illegible]
[illegible]
[illegible] elevated.

There are other novel methods of treating the disease some of which are perhaps useful. Dr Williams advises the practice of total abstinence from both food and drink, for such a time as may sufficiently long, to permit the blood in the circulation to be reduced by their absorption to its normal quantity, and thus restore again the balance, lost through the cautious use of food. For, eight hours is generally sufficient, and this [illegible] may be assisted by bleeding. Some recommend a hearty meal with plenty of condiments, and then a hearty toddy or copious draught of water on the before retiring. These are would probably not be productive of counteracting in the stomach, but if the complaint should not be relieved [illegible] the food and [illegible] the substance [illegible] into the

circulation it is [illegible] and [illegible]. In preventing the excoriation of the [illegible] and [illegible] [illegible] frequently with grease or simple cerate. A soft linen handkerchief should be used and all irritants prevented.

Prophylactic treatment is of much importance and the liability to the complaint greatly increased. The best method of enduring the system proof against cold is to take cold baths either of the parts most exposed or the whole surface. Those leading sedentary lives within doors should wrap up well before going into the open air and never expose themselves to sudden and great changes of temperature.

The best combination of the narcotic, opiant and diaphoretic remedies is Dover powder in ten or twenty grain doses. Eupatorium is the best infusion or substitute a mild diaphoretic and tonic. Iron and its preparations are also [illegible] in subacute cases. Tinct

[illegible]

7

13

15

12

An

Inaugural Dissertation

on

Pneumonia Stercoris

Submitted to the Faculty

of the Medical

Faculty of Physic

of the

University of Maryland

[illegible]

By

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] It is an uninterrupted motion of time [illegible]

[illegible] all the powers of art [illegible]

[illegible]

[illegible] with the writing of the [illegible]

[illegible] with strokes [illegible] all the other arts of the [illegible]

[illegible]

[illegible]

the thorax; difficult respiration, and when the [illegible]
[illegible]; [illegible] expiration [illegible]
subsiste as a general [illegible] of the [illegible]
starting during sleep [illegible] [illegible]
frequent cough; pulse small and irregular; [illegible]
dry; diminution of urine; [illegible] [illegible]
of the fluid [illegible] [illegible] [illegible]
observed by the patient, in some [illegible]
[illegible]

[illegible]
[illegible] the [illegible]
[illegible]
[illegible] the serum [illegible]
[illegible] [illegible] [illegible] [illegible]
other, and from [illegible] [illegible]
[illegible]
[illegible] [illegible]

[illegible]
[illegible]
[illegible] [illegible]
[illegible] [illegible]
[illegible] [illegible]
[illegible] [illegible]

[illegible]

[illegible] bronchial breathing; [illegible]
[illegible] of the respiratory murmur; [illegible]
[illegible]
[illegible] in connection with the other [illegible]
[illegible] absolute [illegible]

[illegible]
[illegible]
[illegible] in other [illegible]
[illegible] the most accurate [illegible]
[illegible] will sometimes [illegible] in [illegible]
[illegible]
[illegible]
[illegible] denote [illegible] in the [illegible]
[illegible]
[illegible]
in [illegible] breathing [illegible]
[illegible]
[illegible]
[illegible]
[illegible]rmation

[illegible]
[illegible]
[illegible]

[illegible]

[illegible]

Epigram

[illegible]

[illegible]

[illegible] be [illegible]

[illegible]

[illegible] the opening intended to [illegible]

made through the sternum into [illegible]

[illegible]

Questions of [illegible]

[illegible] in the throat [illegible] the [illegible]

& the symptoms [illegible]

[illegible]

[illegible]

[illegible] and enlargement of the [illegible]

[illegible]

[illegible], the inclination [illegible]

inability to lie in the [illegible] —

D. [illegible]

[illegible]

[illegible]

[illegible]

Modern Science

thereby act as a foreign body — [illegible]
would be, such [illegible]
[illegible]

[illegible]

And the symptoms urgent, we must [illegible],
And the blood is coagulated, the [illegible]
[illegible] may not be [illegible] enough to [illegible]
[illegible]
[illegible]
the coagulation and thereby [illegible]
[illegible]
[illegible]
[illegible] the tendency to [illegible] the [illegible]
the coagulation would [illegible]

[illegible] of the [illegible]
[illegible] from the [illegible]
[illegible], [illegible] in the [illegible]
[illegible]
[illegible] [illegible]

Operation

[illegible]

The same directions [illegible]
[illegible]

[illegible]

Extravasation of Blood

My extravasation of either of the large vessels of the chest is one symptom of obstruction in the lungs. [illegible] the action of the lungs and the circulation of the blood [illegible] management. It may be introduced by [illegible] but should the blood [illegible] it is better [illegible] that it may be evacuated in the sputum from the bronchial tubes without interruption of respiration.

The most common [illegible]

[illegible]

[illegible] matter in connect with [illegible]

[illegible]

Wounds penetrating the [illegible] the lungs have produced [illegible] in the chest. Bronchial [illegible] and [illegible] with other [illegible] instruments inserted in various [illegible]

[illegible]

[illegible] the impulse [illegible] [illegible] Symptoms [illegible] [illegible] [illegible] and by percussion we have measured [illegible]

[illegible]

[illegible] and the [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

Sometimes the [illegible] sensation [illegible] the
[illegible] is indicated [illegible]
[illegible] matter [illegible]

It is [illegible]
fractured rib [illegible]
produces these symptoms. [illegible]
[illegible] fractures [illegible]
by [illegible] forward [illegible]
[illegible] and irregular; [illegible]
[illegible] the [illegible] immediately [illegible]
[illegible]

A crackling noise is heard on pressure
[illegible] the removal of the [illegible]
[illegible] along the course of the
[illegible]
[illegible]

By [illegible] a considerable [illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible] in a short time [illegible]

[illegible] lung [illegible] bottom [illegible] that [illegible]
with a [illegible] [illegible] [illegible] [illegible]
can be made that [illegible] [illegible] [illegible]
air, but [illegible] lungs [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
weapon as it might [illegible] [illegible]

But if the object is combustion [illegible]
[illegible] [illegible] [illegible]
a small [illegible] in the hand of a skilful
surgeon is a preferable instrument. The
[illegible] [illegible] [illegible]
[illegible] [illegible] but if the former be used near
the vertebral column, the perforation should
be made as before as directed — if the
[illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]
bottom of the [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible]

An Inaugural Dissertation On Cholera Infantum

Submitted for Examination to the Honorable Regents and Faculty of Medicine of the University of Maryland for the degree of Doctor of Medicine

By Francis M. Lloyd

1855

Cholera Infantum

Of all the diseases with which childhood humanity afflicted in its earlier stages, this is, at least amongst the infantile population of our Cities and towns, the most distinctive; its severe inflictions and widely spread devastations are annually apparent. This scourge makes its appearance sooner or later according to the season and seasons of Country in which it is found; with us it seldom shows itself before the commencement of our summer heats and continues throughout the summer months occasionally not leaving its ravages before the Centre day of October or the season of frost; but on this, the violence is much spent and it falls more within the power of our remedies. Its frequency and danger

are always proportionate to the heat of the weather; affecting children from three or four months after birth until the second year, but is particularly fatal during the second summer; so much so that this period has become proverbial amongst mothers as one of unusual peril, and should it escape an attack at this period, or pass safely through the disease, it is considered to have a fair chance of surviving the period of infancy. The first symptom of the disease is usually a profuse diarrhoea the stool having very fluid and generally of a very light colour, though often of a pale yellow or green; to the diarrhoea is soon added an extreme

irritability of stomach — everything taken into it being rejected immediately, and with violence, this irritability of stomach, in most cases continues throughout the attack, and in many frequent spontaneous vomiting is a prominent symptom. After the disease has continued for a short time, the discharges from the bowels are ordinarily composed entirely of a colourless and inodorous fluid containing often minute random flocculi and are discharged without the least effort. They are occasionally brown, more or less tinged green, yellow or brown and not unfrequently deep green, sometimes they consist altogether of stained or mucous occasionally tinged with blood without other modifications, or exceedingly offen-

sis. Very frequently the vomiting becomes suspended, even at an early period of the attack, while the discharges from the bowels continue, or augment in frequency and in quantity, the irritability of the intestinal canal being often such, as to cause whatever food or drink is taken to be thrown off rapidly, without having undergone the slightest change. The infant becomes greatly affected with extreme languor and prostration, and is rapidly emaciated; the flesh becomes soft and flabby; the skin languishes about the neck; the fontanelles sink greatly; the eyes become sunken;

and the whole surface assumes the appearance and fullness of health, and becomes pale, and either moist and clammy, or harsh and dry, being reduced in a few days, after this, to an extent that would scarcely be credited by those unacquainted with the disease. The pulse, from the very commencement of the attack, is usually quick, frequent, small and often tense. The skin in a majority of cases is dry and hot; the head and abdomen are often hot, while the extremities retain their natural temperature, or are even decidedly cool. The tongue is moist, and covered with

a while closing remarks. There is always intense thirst which fluid is taken being almost immediately ejected from the bowels. The child suffers more or less pain in the abdomen, as indicated by its fretfulness, low moaning cries, frequent changes of position, the drawing up of its knees and its occasional acute screams, it is sometimes bowed and tender to the touch. During evening there occurs in most cases, a decided febrile reaction, countenance pale, wan, and languid, eyes sunk and dull with great insensibility of the surface; the child moans and sighs much; enjoys but little sleep; is excessively

irritable, sometimes attempting to bite its nurse, or rattling about its head, or constantly putting its hand to its forehead. Indeed the symptoms of general irritation more or less rapidly increased. The discharges from bowels continue to be frequent and profuse, but dark coloured, like dirty water, or the washings of stale meat and often very offensive, they not unfrequently, however are small in quantity; and composed entirely of a dark colour mucus, mixed with food and drinks that have been taken. The emaciation of patient becomes more; the eyes are sunk and hollow.

and flaccid; its countenance pale and shrunken; the nose sharp and pinched; and the lips thin dry and shrivelled, surface of body here cool and clammy, of a dirty bluish hue, and often covered with pustules. The tongue and extremities cold and shrivelled, and shining, or cloudy, as well as the parieties of the mouth with epithelium. In many cases the child lies constantly in an imperfect doze, with half closed eyelids, and an insensible to external impressions, that flies very frequently light upon the bare eyeballs without the patient exhibiting the least consciousness of their presence. The abdomen becomes more or less

sympathetic and the hands and feet of leaden hue, or pallid and edematous. The fourth day, there is a sense of uneasiness, which induces the patient to thrust his hand deep in the mouth as if to remove some offending substance. On morning of the fifth day, an eruption of minute white vesicles occurs upon neck and breast, which is considered by some as a fatal symptom. The patient, unless relieved from his suffering by a judicious treatment, becomes daily more and more exhausted, rolls his head about when awake, and utters constantly almost plaintive, scarcely audible cries. He falls at length into a state of complete coma, and dying

frequently preceded by convulsions. Not unfrequently at much earlier period of the disease the brain becomes affected, and the child dies with all the symptoms of acute meningitis. The general nature of the morbid phenomena offers of course ground for a favorable prognosis; but none of the most cheering signs are a return of the discharges to the healthy condition, increased liveliness on part of the child, a regular appetite, and diminished frequency of evacuations, are also favorable signs. The duration of the disease varies from a few hours to months. The lesions exhibited by post mortem examination after death vary according to the period of the disease, when death takes place early,

an unusual paleness of the mucous coat, and more or less hepatic congestion, are often the only morbid appearances discoverable. When the case has been of a more protracted character, internal ulcers in patches or patches, in different parts of the stomach and intestines, is often present. The ulcerations are sometimes very minute and isolated and spread over a considerable portion of the stomach and duodenum, or over the small intestines only. They have the appearance generally of minute extravasations of blood. In the lower intestines the patches occur in clusters, so as to form patches of scurf varying in size though never of any great

extent, and often slightly elevated, from a thickening of the mucous membrane at points occupied by them. The mucous follicles of the intestines are very generally enlarged, often in a state of inflammation and occasionally of ulceration. The intestines are generally empty or contain mucus, a small amount of chyle or fecal matter. In the mesenteric glands, in addition to inflammation of the meninges of the brain are very frequent by present. This disease is evidently produced by the action of a virulent poison, and elaborated at some distant by upon the skin or distinctly upon the digestive mucous surface at an age when the body is strongly predisposed to disease from the effects of debilitation and from the

increased development and activity of the mucipparous follicles which takes place at that period. As a proof that Cholera Infantum depends upon a high degree of atmospheric temperature is that its prevalence is always in proportion to the heat of summer; the disease increasing and most fatal with the rise of the thermometer, and declining with the appearance of cool weather in the autumn. Nothwithstanding, the disease is not produced by heat alone, in its more aggravated forms, it is proved by its occurring almost exclusively in the large and more crowded Cities, and by its especially prevailing, and being most destructive to life, among the children of the poorer Classes, inhabiting small, ill ventilated houses, situated in narrow, confined lanes, and alleys in situations abounding with accumulations of filth. It may be

cur in the country, when it does, it is almost exclusively in low damp, and stagnant centrally situations. But there are other causes which occasionally produce a predisposition to the disease or calling already existing predisposition into action, among them may be mentioned the proof of ventilation, unwholesome food, worms, and exposure to cold in a relaxed state of the skin. Ventilation though probably not alone capable of producing it, very much favours its production, and greatly aggravates the danger as most of the fatal cases occur during this process. How did the moral influence upon the origin and severity of the complaint is proved by the fact, that clinicians feed by the bottle, or the spoon, are more frequently and more dangerously affected than those nourished at the breast. The most important

point in the treatment of this disease, is to remove the child from a heated and impure atmosphere, to the pure air of the Country. In general, the happiest change in the disease speedily follows this change of atmosphere, with a proper attention to diet and clothing, the child will almost always recover, even without medicine, or with such only as may be entitled, by the medical adviser to the judgement of the Mother or Nurse. When the complaint is of longer standing, and the irritation of the bowels has had time to degenerate into inflammation, the success of the measure is less striking though even then, it will be found the most effectual, especially where judicious medical advice can at the same time be obtained. Cases often occur, in which under apparently the most desperate circumstances, the child upon leaving

the city, almost immediately begins to revive, and advances rapidly to convalescence, should circumstances render removal impracticable, the child should be carried daily into the country, or into, one of the open and most airy squares of the city, and kept there as long as possible, great care should be taken to have the apartment at home well ventilated and perfectly clean and dry. In relation to the medical treatment, the indications appear to be, to remove causes of irritation from alimentary canal by laxatives and cathartics, to prevent the hepatic secretion, and thereby remove portal congestion by calomel or some other mercurial; to direct excitement externally by diaphoretics, and by measures addressed to the surface; to relieve irritation by anodynes, and inflammation when of a decided character by direct depletion;

to check excessive evacuations, in the advanced stages, by astringents; to modify the morbid state of the affected membrane by alteratives; and finally to support the patient by suitable stimulants when greatly debilitated. So distressing in some cases, are the effects of the gastric irritability, that we are under the necessity of resorting at once to such means as are calculated to allay its violence as Lime water with milk or what is preferable Sol: Bi: Carb: Potassa with few drops of Prussic acid, or Cataplasms made of different spices, or Mint steeped in brandy applied to Epigastrium. If these should not effect a removal of the vomiting, a blister will scarcely ever fail. Thus, no injections may be resorted to, containing from 2 to 5 grs Prussic acid in a thin starch. After this object has been accomplished, we must have recourse to such remedies as act on the whole line of intestines, preferring such at the same time from all the secretions liver, &c. Calomel by

common consent, has been decided. If this
proved, it is in Calomel we strongly confide
as possessing properties that eminently adapt it
to this disease: the effects of mercury, however, are
not to be estimated solely from its purgative quality,
but by its specific action on the hepatic system
and its power of affecting through the medium
of the circulation, a lacking surface, vitiated
with high irritability, and in a state of in-
flammation, either alone or combined with
Ipecac & opium, in quantities, and at times pro-
portionate to the urgency of the symptoms, it is
rarely fail to bring about favorable effects, prece-
dors of a better state of things, to salivation
and to determine to the surface. In a still
more advanced stage, when the continuance
of the evacuations threatens to exhaust the
patient, it becomes necessary to attempt to arrest
them by astringents, for this purpose the Calcination
of Opt: Stramonium in combination with Calcareous
oxide, or you may give a combination
of Acet Plumbi: Ipecac & opium as occasion
may require. Then generally prevails some

or less torpor of the surface, denoted by the harsh, dry and shrivelled skin, with much inequality of temperature, it becomes highly important to rouse anew the energies of the cutaneous vessels; the tepid bath under these circumstances has been attended with marked benefit, when we wish to make a powerful impression on the surface add mustard or cayenne pepper. When heat is deficient in the extremities, the equilibrium should be restored by frictions, and by rubefacients applied to the legs and arms, warm perfusions may be used also. When in the course of the complaint, there is much tenderness of the abdomen, and the patient not greatly exhausted, leeches followed by warm fomentations or emollient cataplasms, should be employed and, if these do not relieve the inflammation, they should be succeeded by a blister. To allay the painful griping or sensations of nausea complained of in these diseases repeated emetics or three times a day, in the circumstances, will afford great relief; infusions of coca have been recommended with

same intent. Should symptoms of meningeal inflammation occur early in the disease, they must be counteracted by local and general depletion, carried as far as circumstances will warrant, by cold application to the head and by blisters. To allay the excessive and intractable thirst more or less present in every instance, cold mucilaginous drinks given in small quantities at a time and frequently repeated, will answer better than anything else. Towards the latter stage, however, when our little patient is in a sinking condition, we must resort to stimulants; as weak sweetened wine or brandy and water will often have the effect of rallying the sunken energies of the system. Notwithstanding all our boasted remedies, I regret to add that often all are administered without profiting our end to its range; in each case only resource lies in the powers of the constitution, for to this and to its more equable condition we believe the secondary fever

is indebted for its supposed efficacy, as the foul and heated atmosphere must continue to prove a constant source of irritation.

An
Inaugural Dissertation
On
The Physiology of Digestion
Submitted to the Examination
of the
Provost, Regents and Faculty of Physic
of the
University of Maryland
for the
Degree of Doctor of Medicine
By
James Smith
of
Northumberland County
Virginia.
Session 1834 – 35.

The science of medicine comprises so many branches, all of which are of the deepest interest, and greatest importance, that to a student, who by assiduous study has delved into its mysteries, and thereby made himself thoroughly acquainted with these several branches, it becomes to him a matter of no little difficulty to make selection of a subject for his thesis. In a practical point of view there are few subjects, if any, a full knowledge of which is more indispensably necessary to the physician, than that of digestion; therefore I have concluded this to be the subject of my consideration. Upon commencing however I must add, that the subject is one too comprehensive to be expressed on the ordinary number of pages allotted to a thesis; therefore I shall only investigate its function, describing at the same time some of the principal organs concerned in the act, without treating of the different dietetic qualities, and the laws, which govern the quantity of food &c.

In the investigation of the operations of any complicated piece of Mechanism, experience shows the advantage of first examining the component parts of the machine, and ascertain their individual action, which when

completely understood, the attention may then be directed to their combined actions; and the bearing of these combinations upon each other, so as to produce the general result. In this manner to acquire a full knowledge of the great nutritive functions, the mind must be directed to the same examination, (1) to the component parts; (2) the individual actions of these parts; (3) their combined actions, and (4) the bearing of these combinations upon each other, so as to produce the grand and wonderful result, by which all manifestations of life exists.

It is a law of nature, that in inorganic or organic matter, waste is the result of action, and the amount of waste is proportional to the amount of action employed: it becomes then a matter of no little consequence, that some means should be devised, by which waste may be restored, and to this end the Creator has adopted the means, thus displaying his infinite wisdom & power, in characterizing the animate from the inanimate, giving to the former the power of appropriating nourishment to the disintegration of its tissues, and to the building up of its fabric. Digestion then may be defined to be, that process by which the food is reduced to such a condition, that the

nutritive material can be separated from it, being thus by rendered fit to be taken into the circulatory system by absorption, and become assimilated to the formation and repair of the tissues of the body. The subordinate acts of this process are (1) Prehension; (2) mastication; (3) Insalivation; (4) Deglutition; (5) Chymification or action of the stomach; (6) Intestinal digestion, or action of the small intestines, and (7) defication, or action of the large intestines

The organs concerned in the execution of this function as exhibited in different classes of animals, vary greatly with respect to their habits, and the nature of the aliment with which they are supplied so. In the lowest order of the animal kingdom, some have no special digestive apparatus, and either absorbing food which is already sufficiently comminuted or, having their whole tegumentary surface capable of secreting a digestive juice; as the Sponge tribe. (2) Some are without any permanent stomach, which when fasting bend themselves around their food, and make an extemporaneous stomach of their skin; as a naked Rhizopod. (3) Some have stomachs with vascular tubes for diffusing the digested matter, and thus

increasing the extent of absorbing surface. The tube is either coecal, admitting only chylific matter, the excrementitious portion of the food being retained in the central cavity to be ultimately ejected either at the mouth as the star fish, or by a separate anus at the opposite end of the body. (4) Some have an alimentary canal of some length, commencing by a mouth at one end, and terminating by a single anus at the other. The tube may be bent upon itself so as to bring the anus near the mouth, as in Mollusca. Many other examples might I enumerate as exhibiting the different varieties of digestive apparatus in the lower order of animals, but the subject which chiefly claims my attention, is a description of the apparatus, and its process, as is known to the omnivorous animal, man, which I now hasten to describe.

As soon as the food is taken into the mouth it becomes subjected to the action of the teeth, thus being the first change the food undergoes in the alimentary canal — It is now crushed and finely comminuted being in the mean while undergoing a preparatory state for the secretion of saliva, and the mucous secretion of the buccal cavity, which fluid is reduced in a

pulpy state, and rendered easy of deglutition. The salivary glands are four in number, viz. the parotid, submaxillary, sublingual, and intralingual: the largest and most important of all being the parotid.

Saliva as commonly secreted, is not perfectly pure, being mixed with mucous, and numerous epithelial scales from the lining membrane of the mouth; but when obtained in a pure state from the parotid ducts, it is a clear transparent, watery fluid and having an alkaline reaction. The rate at which it is secreted, is dependent altogether on circumstances. When food has not been recently taken, and the muscles of mastication are at perfect rest the nerves of the mouth are then subjected to no unusual amount of stimulus, and the quantity secreted is much diminished, being only sufficient to lubricate the mouth. I may also add that mental emotions or impressions have their influence, as the sight or thought of food. The average amount of saliva secreted in a given time is difficult to state, dependent more or less upon the nature of one's diet &c. The purposes for which this liquid is secreted are manifold. In the first place it keeps the mouth

in a moist condition, facilitating the movements of the tongue in speaking &c. But in every mechanical purpose it serves, is that of forming food into a soft pulpy mass, rendering it easy of deglution. It is also supposed to act in some chemical way in the digestion of the food, as has been ascertained in experiments tried on some of the lower animals, and especially does it evince its influence in transforming starch into dextrine and grape sugar, which enter so largely into the composition of food.

The next step taken in the process, after the food is sufficiently comminuted and moistened, is the action of deglutition, which for the sake of convenient description, is better divided into three stages, the action of each of which I deem scarcely necessary to minutely explain; but let it suffice for the present to know that the whole is performed through the instrumentality of the muscles of the throat and tongue. During the passage of food through the fauces in the second stage, the larynx and posterior nares are protected by the retraction of the tongue, and the elevation of the larynx, by which the epiglottis is pressed over the rima glottidis, which is then closed

during this process. The communication between the fauces and posterior nares is cut off by the muscles of the posterior palatine arches, which contract in such a manner as to cause the sides of the arch to approach each other like a pair of curtains, the uvula at the same time acts like a valve between the two sides.

After the food has passed through the oesophagus, by the involuntary and rhythmical contractions of the organ, it then enters the stomach, where it undergoes another change. Before entering upon the nature of this change, I will first give a description of the organ, as to its relations and structure. This is a conical organ, which lies transversely across the abdomen at its upper part, and occupies the left hypochondriac and epigastric region, inclining downward and forward, and to the right side. The orifice by which the food enters, is at the left end, and from its relation to the heart, is called cardiac. The orifice of egress is on the right, and is named pylorus. The anterior face of the stomach inclines slightly upwards, the posterior looks downwards. The upper border is concave and is the lesser curvature. The lower is the reverse of this, and is called the greater curvature. The cardiac portion is the

larger, and is the base of the cone. When the organ becomes distended with food, it revolves around its lesser curvature as its axis, its faces becoming superior and inferior. In addition to the above description, the stomach consists of three coats, viz: an external (serous) an internal (mucous) and an intermediate or muscular. The mucous coat is smooth and velvety, which when the stomach is in a relaxed condition, is thrown into numerous rugae, presenting under the microscope to be a large number of glands of great minuteness, the office of which is to secrete a fluid known as the gastric juice, which performs a very essential part in the process of digestion. These glands on the introduction of food become very much distended with a liquid which is secreted by them, but after the food has left the stomach they become comparatively insignificant. The muscular coat consists of three sets of fibres, the longitudinal, circular, and oblique. The longitudinal abound near the lesser curvature, the circular near the pylorus, while the oblique run downwards, and inwards from the cardiac orifice.

The sensible and chemical characters of the gastric juice as described by Dr. Beaumont of the American

army, whose experience on stomachic digestion is unsurpassed by any physiologist of the day, being favoured as he was with an occular demonstration of the whole process, in the case of St. Martin a young man who was accidentally wounded by the discharge of a musket, immediately over the stomach. He (Dr. Beaumont) states it to be "a clear, transparent fluid, inodorous, a little saltish, and very perceptibly acid. Its taste is similar to that of thin mucilaginous water slightly acidulated with muriatic acid. It is readily diffusible in water; wine or spirits, slightly effervesces with alkalies; and is an effectual solvent of the materia alimentaria. It possesses the property of coagulating albumen in an eminent degree; is powerfully antiseptic, checking the putrefaction of meat; and effectually restorative of healthy action when applied to old fetid sores, and foul ulcerating surfaces"

The action of the gastric juice on the food in the stomach, is a matter of much dispute, and great uncertainty. Müller ascribes the solvent property to muriatic acid, the pepsin being held to act as a dynamical stimulus. Liebig compares the

innomenon to one of fermentation, the pepsin acting the part of a ferment.

As previously stated, the gastric glands immediately on the introduction of food into the stomach, become distended with fluid; but in addition to this, the muscular coat is aroused from its apparent torpidity, and the blood-vessels, which were before in a relaxed, contorted state, are now less distended, and the circulatory system is accelerated; in short the whole are in lively exercise about the performance of their several functions. The food is in the mean while revolving from side to side in the stomach, undergoing a process like to that of churning, by which the digestible portion is converted into chyme, after which it leaves the stomach to undergo other changes presently to be noticed. The liquid portion of food is immediately absorbed on introduction into the organ, by numerous glands embedded in its structure, and which are closely analogous in their appearance to those found in the skin, and other parts of the intestinal tract. This liquid is thence carried into the circulation.

The digestion of fatty aliments is not a chemical, but a mechanical change; the ordinary temperature of the stomach being one hundred degrees on Fs thermometer, the fat is simply melted, and carried along with the chyme

for further changes. The circumstances which influence the process of chymification are many — among some of them are; (1) The quantity of food taken at one time; (2) The stomach should be moderately filled, and no more; (3) Time should be allowed after digestion of one meal for the organ to recruit; (4) Tranquility of mind and temper are very essential; (5) Good health &c. All these conditions existing, the time required for the digestion of a meal, may be computed to be from two to four hours.

The influence of the nervous system on gastric digestion is threefold; (1) in giving rise to the sensations of hunger and thirst, which induce to the taking of food; (2) in influencing the secretion of gastric juice as to its amount, and probably also as to its quality, either directly or indirectly through the sympathies of the stomach with the organ of taste more especially; (3) in determining the movements of the stomach, and the passage of food into or from this organ. As proof of these statements, it has been found by experiments tried on some of the lower animals, that if the nerves leaving from the stomach, mouth, and fauces to the brain be divided, the animal on which the experiment is performed, has no inclination whatever to eat, although a few moments previous

was exceedingly hungry, and now with the sensation of thirst and hunger have been arrested.

Having described the stomach, and given the sensible and chemical characters of the gastric juice; the circumstances under which it is secreted normally; the nature of the change which albuminous food undergoes; the mechanism of the movements of the stomach, and their uses; I next propose to describe the other organs concerned in the process, together with a brief exposition of the office of each.

The small intestines are by general consent divided into three portions, viz; the duodenum, jejunum, and ileum, the total length of which is twenty five feet. The duodenum is about eight inches long, the jejunum constitutes about two fifths & the ileum nearly three fifths. The duodenum forms a curvature, the convexity of which is to the left side. It consists of an ascending, descending, and transverse portion.

The pancreas and liver pour their secretion in a blended stream into the second portion. The jejunum and ileum extend in successive coils from the termination of the duodenum to the right iliac fossa, where the large intestines begin, occupying the umbilical, lumbar, and a part of the pelvic cavity, and is connected by the mesentery

to the posterior wall of the abdomen. The large intestine is likewise divided into three parts. Viz; the Colon, Coecum, and rectum. It commences at the right iliac fossa, ascends through the right lumbar region to the under surface of the liver, then crosses at the hepatic ~~surface~~ flexure obliquely to the left side, and then descends through the left lumbar region by the splenic flexure to the left iliac fossa - When it reaches the left iliac region it forms the sigmoid flexure - It then descends to the pelvis, where it passes by the sacrum to the anus, thereby forming a circle in which the small intestines lie. The intestines like the Stomach have three coats, the office of which is similar, and have imbedded in their mucous coat numerous glands named after their discoverers, the true office of which physiologists are at variance that their secretions are in part requisite in the conversion of chyme into chyle, can't be for a moment questioned, but the chemical nature they fulfill has not been clearly explained

The liver is the largest gland in the body, and lies in the upper part of the abdomen, just below the diaphragm, extending through the hypochondriac and epigastric regions. It resembles in shape an ovoid body, which through its long diameter. It is about twelve inches

in length, three in width, and three in thickness at its posterior border, and weighs about four pounds. The office of this gland, and the nature of its secretions, I will, hereafter briefly describe.

The pancreas is a long narrow flattened gland, lying transversely across the vertebral column, immediately behind the stomach, deep in the epigastric region. The right end is the larger and is situated in the curve of the duodenum. The color of the gland is of a pinkish grey. It is from five to six inches long, and from one to two broad, and weighs from two to four ounces. The liquid it secretes is almost identical with that of saliva, and has a chemical constitution analogous to it, which when mingled with the fatty portion of the food, possesses the power of emulsifying it, and rendering it thereby fit for absorption.

Bile is a viscid fluid, of an exceedingly bitter taste, and of a greenish yellow color, which serves both as an excrementitious, and digestive agent.

Lymph and Chyle closely resemble each other, differing only as to color in appearance, the former being nearly colorless. Both contain the same ingredients, but not in the same proportion.

After the Chyme has remained sufficiently long in the-

intestines to become converted into chyle and lymph. Through the agency of the various fluids which have been described, each performing their respective parts, the lymph and chyle are then absorbed, carried into the mesenteric glands, and thence into the receptaculum chyli, which is situated at the front of the body of the second lumbar vertebra. From the receptaculum chyli they are thence carried along the thoracic duct, where other lymphatic vessels pour in their contents, to terminate at the junction of the subclavian, and jugular veins, and there they — absorbed and carried into the circulatory system, and after having passed through the lungs, become arterialized and assimilated to the wants of the system. The large intestines in the mean while act as a reservoir and excretory canal for the fæces, which after a sufficient accumulation are expelled under the influence of the reflex system of nerves. The involuntary escape of the fæces is prevented solely by the action of the sphincter ani muscle.

"Clinical report of Cases"

Respectfully addressed

To

The honoured Faculty

Of

"The "University of Maryland".

By

"Cincinnatus Cutten, of

Norfolk Virginia".

"Baltimore, Wednesday, February 14th

"1855"

"Case 1st. Michael Dorsey, act 20 years: light hair, blue eyes; not very stout; entered the Hospital on 4th August 1854: had been trading between Philadelphia and North Carolina — attacked seven weeks ago with fever and general aching — unaccompanied by any rigor — was confined 4 weeks to the bed with fever, probably remittent, for which he was severely bleeded — "Present condition — Very pale and very much emaciated — Appetite impaired — bowels constipated — pulse soft, regular 76 every day, about noon is seized with headache and fever, these symptoms declining towards 8 O'clock with profuse diaphoresis tongue clean and moist — he is complaining of excessive languor.

℞ — Pulv Aloes, gr XV: Ferri Sulph gr XX: Quinine Sulph gr XX: Ext Gentianae ℈j — Fiat Pil 20 — one three times a day. "he commenced with this prescription on the 5th.

August 6th Symptoms same as on yesterday bowels still unmoved: treatment continued and unvaried, except as cathartic indication Pil cathart. comp. ℥j at once."

continued

"Aug. 17th Feels better – pills acted well – paroxysm milder to day – appetite returning – treatment continued with omission of pills: Under this treatment Dorsey continued to improve, and was discharged cured on 21st."

"Case 2nd. "George Jones: aet 22: dark hair, blue eyes – previously healthy – was admitted August 5th – has been trading between New York and North Carolina – Seized July 28th with looseness of bowels, unaccompanied by pain or fever – number of stools amounting to half a dozen in 24 hours – liquid and yellowish. – "Present condition Aug 6th – Four stools since last night – liquid, yellow, and attended with slight pain – no abdominal tenderness on pressure – thirsty – appetite good – tongue red smooth and disposed to be dry – pulse is natural – sleeps well –"

"℞ – Acid. Sulph. dilut. f. ʒiiss – Tr Lav. c. ʒiij – Tr Opii ʒiss – Tr Camph ʒj: Aquae q. s ℥ij: Ft. M. A teaspoonfull every 3 hours in a little water. Diet, milk and bread in small quantities. 7th Only 2 stools since yesterday – no pain – Other symptoms unaltered – continue treatment. 8th Two stools – is sitting up and feels better – Stools very copious, liquid and yellow –

℞: Cretae Prep. ʒj: Tr Catechu ℥ss – Tr Opii ʒj: Aquae, q. s. ℥iv: – Ft. Mist. a tablespoonfull every 3 hours –

℥ continued"

"Continued to improve up to the 14th when an imprudent meal brought on the diarrhoea again - for which the following was ordered -
℞: Bismuthi Sub-Nit ʒij: Pulv Doveri ʒss: Tt. chart. 12 - One, three times a day -
This treatment was continued until the 17th with, apparently but little benefit, when the following was ordered - ℞: Plumb Acet gr xx: Pulv Opii gr v - F. Pil 12 - One every 3 hours -
On the 18th he had but two stools - nearly natural - and the pills were reduced to 3 per day -
19th Two stools, slightly tinged with blood - and accompanied by straining - discontinue Plumb Acet & Opium - ℞: Extract. Nucis. Vom. grs viii: Pulv Opii. gr v: Mass Hydrarg. grs xv: Pulv Ipecac gr 6 - F. Pil 12 - One 3 times a day -
By the 24th his stools were permanently reduced to two in 24 hours and he was discharged cured Sept 4th."

"Case 3d – William Pearce – aet 33 – by birth a Norwegian – blue eyes and brown hair – very stout – was admitted Augt. 11th – Two years ago, while in New Orleans, had an attack of ague from which he imperfectly recovered – while on his way from New Orleans to New York, in May last, was seized, after exposure to rain, with chills, followed by fever and sweating – was relieved of this attack about the middle of June: Suffers now with simple aching and feverishness, coming on every afternoon – pulse slow, soft, 60 – complexion pale – headache – tongue clean and flabby – appetite good – bowels constipated – no thirst – sleep soundly, but awakes unrefreshed – no enlargement of liver or spleen – ℞: Quinia Sulph, Ferri Sulph, ā.ā. ʒj: Ext Gentianæ ʒij: Ft. Pil 20: One three times a day." Under this treatment he improved rapidly & was discharged cured Augt. 26th."

"Case 4th "Matthew Thompson — aet. 20 — light hair, stout, and previously healthy — was admitted August 12th — seized last night with pain across the stomach — and with rigors and general aching, particularly in the back — Has been trading to Savannah, Ga — thinks he has had no fever — pulse full 76 — tongue coated yellow — no appetite — thirsty — has had five stools to day, with nausea and vomiting — ℞: Acid. Sulph. dilut ℥ij: Tr Sav. c. ʒfs: — Tr Opii ʒij: Aquæ, q.s ℥ij — a tea-spoonful every 3 hours — 13th No stool since yesterday — complains of intense aching across the loins — pulse soft, 80 — headache — sweats profusely — discontinue mixture — ℞: Quiniæ Sulph. xv — Ft. Pil 6 — one every two hours — On the next day he was much better, the back-ache having nearly left — the bowels were moved naturally — he was discharged cured Augt. 15th."

"Case 5th Thomas Gilmer – Act 18. dark hair and eyes and very robust was admitted August 25th – has been trading up James River, and was seized on the 21st with fever and general aching – has had a paroxysm every day since, at the same hour – during the fever he is delirious – Present condition, extremely prostrated – profuse diaphoresis – pulse small 100, & compressible – bowels loose, 3 stools since last night – tongue foul, and red at tip & edges – thirst – bitter taste in the mouth – skin warm – no appetite – no abdominal tenderness on pressure – ℞ Quinine Sulph gr XX: chart 2 – one at once & the other at 4 P.M. – cold drinks – He missed the attack next day, but had a return of it on the 27th. Still sweats freely – tongue red, thick & clean – general aching – ℞ Quinii Sulph gr XX: Tr Cinchonæ ʒss: Morph Sulph gr I. – Aqua q. s. ℥j – F. Mist. a tea-spoonful every 3 hours. He commenced from this time to convalesce, and was discharged entirely well on Sept 5th."

"Case 5th George Lind – act 31 – colored – previously healthy – was admitted Aug. 29th – "last from New Orleans" – was seized Aug. 1st with nausea and vomiting – his stools being small & slimy, accompanied by pain, and in number amounting to 20 in 24 hours – recently they have been less frequent, but of the same character: he has been treated with mercury to ptyalism, without benefit – Has had six stools within the past six hours – Appetite morbidly large – no nausea – tongue clean flabby and moist – no fever, but very thirsty – entire abdomen tender on pressure – ℞: Ext. Nucis Vom. gr IX – Pulv Rhei gr VI – Pulv Opii gr VI – Sodae Bi Carb ʒss – Ft. Pil. 12 – One three times a day – Diet, bread & milk or rice in small quantity" Aug 31st "Three stools since yesterday – larger and less painful – other symptoms as yesterday." Sept 1st "4 stools, more natural – Appetite returning – "continue treatment and may allow him a small quantity of tender meat."

continued

"Sept 2nd only two stools - improving -
Continue treatment -
Sept 3d Three stools, nearly natural -
℞: Cretae Prep ʒj: Tr Catechu ℥ss: Tr
Opii ʒj: Aqua, q. s. ℥iv: Ft. Mist. A
Table-spoonful three times a day -
He was discharged cured on the 6th
of Sept."

An

Inaugural Dissertation

on

Hydrocele,

Submitted to the examination

of the

Provost Regent, and Faculty of Physic

of the

University of Maryland,

for the Degree of

Doctor of Medicine

By

[illegible]

of Maryland.

Baltimore, February, 1835.

In selecting a subject for an essay I have chosen one connected with the Surgical Chair. Hydrocele.
I shall refer to five forms of Hydrocele three of the tunica vaginalis and two of the cord.
1st Simple Hydrocele of the tunica vaginalis.
In the first place I will consider the symptoms. There is swelling which is generally round at first but as it increases it gradually assumes a pyramidal form with its base downwards. The upper extending as the disease advances as high as the inguinal canal. When the swelling is very large the upper extremity expands considerably. If the Hydrocele be large the scrotum loses its wrinkled appearance and becomes glazed and shiny, and in consequence of the integuments being

drawn upon the tumour the penis seems contracted. and the Raphe of the Scrotum is pushed to one side the tumour is much lighter than one of the same size caused by disease of the Testicle. Besides its form and lightness. another circumstance seems to diagnose between it and Hernia it commences in the lower part of the Scrotum and increases gradually upwards. While scrotal Hernia commences from above and extends downwards fluctuation is another symptom but it is not very easily perceptible when the Scrotum is much distended. and its absence is not a proof that a tumour is not a Hydrocele the Tumour being diaphanous is a certain sign of Hydrocele. though the absence of transparency is

not a proof that a tumour is not Hydrocele in the situation of the testicle the tumour is always oblique. another useful symptom is that the cord is always free in Hernia the cord is covered by the swelling but in Hydrocele it can be felt free in the inguinal canal another symptom of a tumour being a Hydrocele is its freedom from pain and tenderness in the majority of cases. except at the testicle also if the tumour be a Hernia you will find it move when you direct the patient to cough but if Hydrocele the contrary

The swelling is caused by a fluid which is generally transparent, and of an amber, pale yellow or straw colour. sometimes though not so often of a greenish or bluish colour. sometimes it is thick and contains matter

of flaky matter, composed chiefly of albumen; the seat of the fluid is in the tunica vaginalis, which in most instances is transparent and simply distended but sometimes it is thickened, and occasionally, in consequence of previous adhesions it presents a secluded arrangement, constituting what is called a multilocular hydrocele. The normal situation of the testicle is at the back of the swelling and below its middle, and this is the situation in which we might expect to find it judging from its anatomical relations. It is of course of much practical importance to ascertain the exact situation of the testicle so that we may avoid wounding it in an operation the opacity, and the tenderness and doughy feel on pressure will

indicate its position. The treatment is different in cases according to their peculiarities. In all cases except those of children the treatment is by operation, and that of two kinds, palliative and radical the former consisting merely in tapping and thereby drawing off the fluid, the latter in doing this, and also in using means for the purpose of inducing such changes as may prevent the return of the fluid the radical treatment by injection is that practised at the present day. The instruments necessary for this proceeding are a trocar and an elastic bag with a neck and [illegible] or a syringe. The fluid, [illegible] time

or a solution of Sulphate of Zinc, or a fluid containing one part of the tincture of Iodine and three of water, or a small quantity of the tincture of Iodine alone. The patient should be placed erect; the surgeon should with his left hand grasp the tumour behind, so as to render it prominent and tense in front, and with his right hand send the trocar and canula through the parieties, holding them perpendicular to the surface until penetration be effected, and then directing them obliquely upwards. So as to avoid the danger of wounding the testicle we next withdraw the trocar and allow the fluid to escape, the injection is now to be thrown through the canula by by placing the nozzle of the elastic bag or syringe in the tube of the canula

The injection is allowed to remain until the patient feels pain in the loins or testicle. The time for its remaining varies in different persons; in adults it is usually from four to seven minutes, but in all cases it must be withdrawn when the patient begins to feel pain in the testicle or along the course of the cord. In addition to the pain patients often experience a feeling of faintness & sickness. The fluid having been withdrawn, the patient should be put to bed, the testicle supported, and the after-treatment regulated according to the supervening symptoms. If no inflammatory symptoms present themselves, the patient should be permitted to move about and be allowed a general bath and the testicle

should be gently compressed and handled so as to occasion friction between the surfaces of the tunica vaginalis; but if the inflamation threaten to be excessive or so great as to render suppuration probable, rest, low diet, support of the testis, and the ordinary treatment for acute orchitis should be enjoined. The tumour usually retires very quickly and often requires the size of the hydrocele or tapping; but in the course of from twelve to fourteen days, under proper treatment, the part generally resume their usual size. At one time it was thought that injection effected a radical cure by the obliteration of the cavity of the tunica vaginalis caused by complete adhesions of the surfaces of

that membrane; but it is now known that, although the serous surfaces are sometimes united, this state is not really essential, that more commonly the adhesions are only partial, and that the cure is effected by a change in the condition of the membrane, from a morbid condition to a healthy one. Many different kinds of fluid have been used for injection, as dilute spirits of wine, dilute Port wine, port wine undiluted, solution of alum, solution of the nitrate of silver, cold water, lime water, and tincture of iodine either alone in small quantity, or mixed with water in the proportion of one part to three. Latterly, port wine and the solution

Sulphate of zinc were the favorite injections, but the tincture of iodine with water is now generally prepared. Mr Martin a surgeon in India was the first who tried iodine injections. The use of iodine injections has since been tried by most surgeons throughout the world and so far as their experience is recorded with satisfactory results. Some use a small quantity and allow it to remain. While others use it diluted and allow it to escape. Some surgeons introduce a tent and a bougie is also used sometimes with very good effect.

In Children it is not advisable to use injections neither is it necessary as the stricture is in most cases easily dissolved by the application of dissolvent

tolious; and when this treatment fails to produce the desired results, simple puncture with the lancet, and escape of the fluid, are usually followed by a radical cure.
In two other conditions injection is not advisable, namely, when the testicle is diseased, and when, though it is sound, the hydrocele is very large. In the latter case the most prudent method of proceeding is to evacuate the fluid by tapping, to allow its reaccumulation until the hydrocele attain a moderate size, and then to proceed with tapping and injection. Various other methods of treatment have been employed for effecting a radical cure, as incision, excising, caustic, seton, and acupuncture; but as these

methods have almost all fallen into complete disuse. It is unnecessary to describe them.

2nd Congenital Hydrocele of the tunica vaginalis. This differs from common Hydrocele, inasmuch as the fluid communicates with the cavity of the peritoneum by a vaginal process of that membrane, within the inguinal canal. In this variety, injection must never be employed while the communication remains, as peritonitis might result from the extension of the inflammation to the cavity of the abdomen. The first indication then, is to obliterate the tubular communication with the abdomen; and a very good means for this [illegible] is gentle pressure by means of a truss. After the obliteration has been accomplished, the tumour has been

dispelled in children by the use of lo-
tions, and in adults the usual treat=
=ment of injections may be employed.
The only judicious operation in any
case before obliterations is the drawing
off of the fluid.
3d. Encysted Hydrocele of the testis.
In this form the fluid is contained
in a cyst, or cysts, distinct from the
cavity of the tunica vaginalis. These col=
=lections present the three following
varieties. first they occur most frequently
below that part of the tunica vaginalis
which covers the epididymus, and
the cysts differ in size, number,
and form, being in some instances
small and pressed into the epi=
=didymus, while in some the tunica
vaginalis is raised up by them, and
they assume a pendulous form, and
in others they become large, but

remain connected with the epididymus by a broad base; secondly, they occur between the Tunica albuginea and tunica vaginalis testis; in this which is the rarest form of all, the cyst is usually single and of small size; and thirdly, between the layers of the loose or outer portion of the tunica vaginalis. In encysted hydro=cele the tumour should not be interfered with, unless it become troublesome from pain, or incon=venient from its size. When inter=ference is deemed advisable, the most judicious proceeding is merely to draw off the fluid by simple puncture. If the tumour should return, and it be thought advisable to endeavour to effect a permanent cure, as the treatment by injection has not been found

to succeed so well as in common hydroceles the preferable treatment, especially when there is a number of cysts, is the use of a seton, which should be introduced and retained untill consolidation be effected.

Hydrocele of the Cords

Of this affection there are as has been already stated, two varieties, namely, diffuse and encysted.

1st Diffuse Hydrocele of the Spermatic Cords. This exceedingly rare variety consists of an albuminous fluid of a white or yellowish colour, diffused throughout the cellular tissue connecting the vessels of the spermatic cord, which tissue is surrounded by a cellular sheath, and this sheath again is invested by an inflammatory

the Cremaster muscle and the coverings of the cord external to it. The affection is of the nature of simple œdema; the cells, however, are so greatly distended as to be converted into large vesicles. In some instances, at the lower part of the tumour, the cells disappear, and the fluid at that part is contained in a single cavity, where it forms a swelling attended with fluctuation. Mr Pott who appears to have met with it gives the give the following description of its symptoms and appearances. The scrotal bag is free from all appearances of disease except when the swell is not congested, it seems rather fuller, and hangs rather lower on that side than on the other side of the

=pended lightly in the palm of the hand, feels barely the testicle. The epididymus is to be felt perfectly distinct below this fullness, neither enlarged, nor in any manner altered from its natural condition, the spermatic cord is considerably larger than it ought to be, and feels like a hair or like an umbilical hernia, according to the different size of the tumour. It has a pyramidal form broader at the bottom than at the top, by gentle and continued pressure it decreases gradually & recedes as you suppose but drops down again immediately on removing the pressure, and nearly as freely in a recumbent as in an erect posture. It is

attended with a very small degree of pain or uneasiness which uneasiness is not felt in the scrotum, where the tumefaction is, but in the loins. If the extravasation be confined to what is called the spermatic process, the opening in the tendon of the abdominal muscle is not at all dilated and the process passing through it may be very distinctly felt but if the cellular membrane, which invests the spermatic cord within the abdomen, be affected, the tendinous aperture is enlarged, and the increased size of the distended membrane passing through it produces to the touch a sensation very much like that in inguinal hernia. Fluctuation will be felt

is small and unattended with particular inconvenience, the most judicious course is not to interfere with it. When interference becomes necessary, the best mode of treatment is acupuncture. The punctures are made at the under part of the swelling and need not be numerous. The fluid escapes into the cellular tissue of the scrotum and is soon removed by absorption. This mode of treatment is unattended with danger, whereas free direct incision is not so.

2nd Encysted Hydrocele of the Cord

The symptoms of this variety are a swelling, slow in its growth and painless, usually of an oval form, movable on the cord, attended with fluctuation, and the

most instances, distinctly trans=
=parent. The tumour is generally
circumscribed and the testis can
be felt separate. This affection
is most common in infants
but it is met with at all
periods of life. The fluid is
sometimes of a straw colour,
but more frequently limpid
and contains little or no albu=
=men, occasionally more cysts
than one are found; but this
is unusual, the fluid being gen=
=erally contained in a single
cyst. This cyst is in most cases
formed of an obliterated portion
of the vaginal process of peritoneum
drawn down with the testis in the
descent of the testicle, sometimes
however the cyst is an adventitious
formation. It is embedded in the

cellular tissue connecting the vessels of the cord with each other, and is embraced by the other coverings of the cord. In children, this affection usually disappears under the use of applications calculated to promote absorption, as in simple hydrocele at the same period of life; and in adults, if interference be necessary, the cure may be accomplished either by tapping and injecting or by the use of a seton.

An Inaugural Dissertation on Scarlatina;

Submitted for Examination to the

Provost, Regents and Faculty of Physic, of the

University of Maryland, for the

Degree of Doctor of Medicine, by

Edwin Augustus Jenins, of Maryland.

Scarlatina

"This is a contagious febrile disease characterized by inflammation of the fauces, and a scarlet rash appearing usually on the second day, and, ending in desquamation about the sixth or seventh day."

Scarlatina, like Variola, Varicella and Rubeola is propagated by a specific contagion and like them observes closely the law of nonrecurrence. For many years, Scarlatina was confounded, with Rubeola, indeed, was so regarded, untill the year 1856 when a difference in prodromata, and progression, established beyond cavil, its claim to be regarded, as a distinct disease. To Dr Pitten is the credit attributed, of pointing out clearly the difference between the two diseases, and, setting forth the peculiar nature of scarlatina and placing it in the rank it now holds as a distinct disease

Authors generally in describing this disease divide it into three varieties, 1st, scarlatina

Simplex, Scarlatina Anginosa, and, Scarlatina Maligna; although described in this manner, each variety is produced by the same cause, and are all essentially the same disease. A case of the simple variety is capable of giving rise to the Malignant, and also a case of the malignant may give rise to the simple form of the disease. In many instances of each variety, the case is well marked, by its peculiar characteristics, but in many others, the symptoms of each variety are so blended together, as to render it extremely difficult to determine to what particular variety they belong.

Symptoms and Course. — Languor, weariness, rigors, flushed face, hot and dry skin, quick pulse, thirst, anorexia, great muscular weakness, nausea and sometimes vomiting. In severe cases the nervous system becomes much deranged, giving rise to headache, delirium, stupor, coma and sometimes convulsions. — The tongue is red at its tip and on its edges and, its surface is covered

by a yellowish white fur, with red, projecting, papillae, - soreness of the throat is complained of by the patient about the time the fever sets in. Inspection reveals diffused redness of the interior of the mouth, with inflammation of the fauces, and, sometimes the tonsils, with more or less swelling; stiffness of the jaws and neck with painfull deglutition, are also very common symptoms of this disease. These may be said, to embrace all the ordinary preliminary symptoms of scarlatina and may all be seen in different cases, - but that they all should be present in one case seldom occurs, perhaps never.

The rash generally makes its appearance on the second day, and, on its earlier or later appearance, to some extent, depends the mildness or severity of the preliminary symptoms, as well absolutely the fate of the patient. In mild cases the rash frequently breaks out without any or with very few of the ordinary symptoms; but on the other hand, when the rash is delayed until

the third or fourth day, the preliminary symptoms are of an aggravated character, and the patient is placed in imminent danger of falling a victim to the disease. It makes its appearance first on the neck, face and breast, sometimes in the flexures of the arms and legs, axillae, groin or on parts that remain for some time in contact with the bed clothing; from these points it seems rapidly diffused over the body, giving to the patient a bright scarlet efflorescence. The color of the eruption has been compared by authors generally, to a coral blister which doubtless conveys a good idea of its appearance. In bad cases the rash breaks out more in patches — is less diffused and of a darker color, frequently interspersed, with miliary vesicles.

The reddened surface is generally smooth, sometimes the papillae are slightly elevated, giving a sensation of slight roughness to the ring — on passing over it — this condition is found most commonly on the legs. The appearance of the rash does not cause the fever to subside or abate in the least

degree, but on the contrary, by the cutaneous irritation it induces, tends to aggravate it.

There is generally slight swelling of the face, hands and feet, and the itching of the skin and extreme restlessness of the patient prevents sleep. The pulse here is more frequent generally than in any other febrile disease, in most instances, numbering from one hundred to one hundred and forty pulsations to a minute, usually weak, but in some cases has considerable force. It not unfrequently happens that the temperature of the body rises to 105° or 106 degrees Farenheit, and by some observers it is asserted to reach 112°. The bowels are often constipated, during the early part of the disease, after which diarrhoea is likely to set in, which is supposed, by many, to be caused, by the patient swallowing the extremely offensive and, acrid, matter, secreted, by the fauces and, throat.

On the sixth day the rash begins to fade, and on the seventh or eight desquamation commences.

The skin is seperated from the body in scales, but where the cuticle is thick, as in the palms of the hands and, sides of the feet, it is seperated, in large flakes. When desquamation commences, the fever begins to abate, the pulse becomes slower and more full, the tongue throws off its coating, but remains red and glossy. The process of desquamation is completed in about two weeks at which time the patient may be considered, free from the disease, but liable to those unpleasant sequelæ, which so often follow an attack of Scarlatina.

The course of the disease is often far less favorable. The nervous system sometimes receives a shock at the beginning, from which it cannot rally, convulsive symptoms rapidly come on, and in the course of twenty four or thirty six hours, death may close the scene; at other times the force of the disease seems directed to the throat, which becomes uncontrollable — gangrene takes place and the strength of the patient is at length worn out by an exhausting process of irritation.

Having given this general view of the disease, I will next proceed to describe its prominent varieties

1st Scarlatina Simplex

This variety of the disease is distinguished by the mildness of its symptoms, and the entire absence of the sorethroat. There is moderate febrile excitement with however considerable acceleration of the pulse; the rash appears early, sometimes indeed, is the first symptom to attract the attention of the patient; sometimes the symptoms are more severe, the pulse becomes very rapid, and the fever intense, attended, occasionally with slight delirium at night. On the fifth day the rash begins to fade and the fever subsides desquamation takes place and the patient soon feels perfectly well again; but according to many authors, more liable to dropsy after this, than after an attack of the severer forms of the disease. There is not however anything peculiar in this variety capable of giving rise to a greater frequency of this occurrence ~~in this~~, than in any other.

other variety of the disease: but is attributable alone to the fact, that patients recovering from an attack of mild Scarlatina, having lost but little strength, and forgetting that they are encased in a new cuticle, which is extremely thin and sensitive, feel perfectly able, and frequently do expose themselves to the influence of a cold damp and irritating atmosphere, at a much earlier period, and at a time too, in which the skin is much more delicate, than those do who recover from attacks of other varieties of the disease. Patients recovering from attacks of the severer forms of the disease, owing to greater greater prostration and more tedious convalescence, take better care of themselves, and, indeed, are unable to leave the house for several weeks, during which time the skin becomes firm and natural; consequently it is much better prepared, to endure the attacks of an irritating atmosphere.

C.

2nd Scarlatina Anginosa.

The symptoms of this varity of the disease are generally violent.— stiffness of the jaws, soreness of the throat, and painfull deglutition are among the first symptoms complained, of by the patient. The affection of the throat here, is very prominent, and gives a sense of much trouble to the Physician, and, danger to the patient; the pulse is very rapid, the skin intensely hot and dry, and the thirst extremely great. The rash generally appears on the second, day, but sometimes not until the third, and is then somewhat irregular, breaking out more in patches, leaving the intervening surface of a natural color.— After being out for a short time, it sometimes disappears for a longer or shorter interval and, then returns again. The mucous membranes of the eyes and nose become affected, sneezing and, epistaxis are not uncommon. The eyes become red, and irritated, but do not water as is common in Rubeola. The inflammation of the fauces

progresses with the disease, having a deep red appearance in the early part of the attack, which soon changes to a dark ashy colour; a considerable exudation is secreted by, and covers the inflammed parts which, if removed, leaves the parts reddened, without the appearance of organic change. Sometimes ulcers exist, which in some cases become gangrenous, imparting to the breath a very unpleasant odor. The inflammation not infrequently extends into the larynx, giving out a pseudo-membranous exudation, producing symptoms of croup. The external parts of the throat generally become implicated. The parotid and submaxillary glands, and the lymphatic vessels become inflamed, great stiffing and tumefaction occurs, pressing against the pharynx - rendering deglutition painful, difficult and sometimes impossible. When the disease of the throat is severe, the inflammation travels back through the eustachian tube into the cavity of the tympanum

causing temporary and sometimes permanent deafness. pus is frequently discharged from the ear, and in many instances continues to do so after all other effects of the disease have passed away. Towards the close of the disease diarrhoea is apt to come on, with more or less irritation of the stomach, — the nasal passages become closed, partly by swelling, and partly by an incrustation, which is formed by the liquid, secreted from the mucous membrane — this condition of the nasal passages, compels the patient to breathe through the mouth alone, producing dryness of the tongue.

Scarlatina Maligna.

In this variety of the disease, the system is in some instances completely overwhelmed by the force of the poison, even in the incipiency of the attack. The rash sometimes does not appear at all — in other cases it may be seen in irregular patches of a dark hue, but it suddenly recedes. The pulse is feeble, frequent and irregular; the respiration preternaturally slow is hurried,

The surface of the body is cool, or in some cases hot in one part and cold in another. Feeble efforts are made at reaction but unsuccessfully; partial heat may be developed, but it soon passes off. Comatose symptoms rapidly come on, and death may ensue in twelve or twenty four hours. In other cases, with more energy of system, and less violence of the disease, its progress is less rapid, and the result more favorable. In these cases the symptoms are, first, of the Angeiotic variety, but very soon assume the Malignant or Typhoid. This condition is indicated, by the severity of the initial pains of the loins and extremities - the tendency to delirium, the late appearance of the rash and its dark colour; as the disease advances the symptoms assume a more decided Malignant or typhoid character; the pulse becomes feeble and the skin less regularly heated, also the eruption disappears or leaves of a darkish or purplish colour, the pseudo membranous exudation in the fauces becomes of a dark

and dirty hue, the breath fœtid, the tongue brown, the teeth and lips incrusted with dark sordes, blood oozes from fissures in the lips and tongue, the urine sometimes becomes bloody, exhausting diarrhœa frequently sets in, and the patient sinks into a state of collapse, with sunken features, cold clammy sweat, weak fluttering pulse and involuntary stools, ending in death towards the close of the first, or during the course of the second week. Sometimes however the patient is safely conducted, through all the ominous symptoms and is again restored to health.

Cause — The cause of scarlatina is generally considered specific and contagious. Some authors however deny the contagiousness of the disease. Those who believe in the contagiousness of the disease, regard its contagion as active, but uncertain in producing its specific effects

From all the facts collected, in reference to this question, the contagiousness of the disease appears well established, but that it is less certain, or that under circumstances equally favourable, it is less apt to be communicated from one person to another than Smallpox or Measles, cannot for a moment be doubted. Scarlatina not infrequently prevails epidemically, the influence of which sometimes extends over a large district, whilst at other times it is confined to a limited section. The effect of this influence varies greatly in different epidemics, giving rise sometimes to cases generally mild, and in others, extremely violent, some inflammatory, some asthenic and others markedly typhoid in their character. A due appreciation of this fact, is highly important in the management of this disease, inasmuch as different epidemics, require very different

modes of treatment. Scarlatina is not confined to any particular age or period of life; all appear liable to it, though children are unquestionably far more susceptible to the disease than adults. The chances for recovery however with the latter, are more precarious than those of the former.

Diagnosis – In the early stage of the disease, and previous to the appearance of the eruption, it may be mistaken for other febrile affections. The soreness of the throat and fauces, in connection with the extreme frequency of the pulse, should however always awaken suspicion in regard to the true nature of the disease. When the rash appears, it may be mistaken for Measles, but with a proper knowledge of both diseases, an error so great can scarcely be committed. Measles are distinguished from Scarlatina, first by the presence of catarrhal symptoms, such as hoarseness

cough, sneezing and deflution of the eyes and nose, previous to the appearance of the rash. In Scarlatina there is more or less irritation of the eyes and nose, but not until towards the close of the attack. Secondly, the appearance of the rash also differs much. In measles it is more elevated, and of a darker colour, being compared by many writers, to the colour of the raspberry. Scarlatina is distinguished from Measles by the absence of the catarrh, by the presence of the throat affection, by the period of the attack in which the rash breaks out, and the difference of its appearance. In Scarlatina the rash generally appears on the second day, in Measles on the fourth. In Scarlatina the rash is but slightly elevated, and generally diffused, over the patient, producing a scarlet appearance, which has been compared, as already stated, to the colour of a boiled lobster.

Prognosis — In the simple variety of the disease, the result is almost always favourable. The exudative variety is much more serious, and not unfrequently proves fatal. Under proper treatment, it may generally be expected, to result favourably. The Malignant variety is always highly dangerous. It is supposed, that two thirds of those attacked by it perish.

Pregnancy and dentition always increase the danger. The occurrence of petechiae, the formation of a false membrane, or an intercurrent inflammation, are symptoms sufficiently grave, to excite alarm, and are not unfrequently followed by the death of the patient. A correct knowledge of the peculiar nature of the epidemic influence, aids very much in forming a correct prognosis. During some epidemics nearly all cases recover, whilst in others, the mortality is fearfully great.

Treatment — In the simple variety very little medicine is required; the patient should be kept in a well ventilated room; if the stomach be loaded, an emetic dose of Ipecac may be given with advantage, cooling drinks should be administered and the bowels kept open with Castor Oil or Sulphated Magnesia. Should there be much debility after the inflammatory stage is over, a little wine likewise may be given.

In the anginose variety a somewhat more active treatment becomes necessary, but for fear our officiousness may prove an injury to the patient, we should bear in mind that the system is laboring under a morbid poison which we cannot eliminate from the blood, but the dangerous effects of which it is our duty to watch and frequently in our power to obviate. An emetic dose of Ipecac may first be given, which should be followed by a dose of Calomel. If the Calomel do

not operate in the course of six or seven hours, a dose of sulphate of Magnesia should be given. The bowels throughout the disease, should be kept moderately open, but active and exhausting purging is highly objectionable. If during the course of the disease diarrhoea should set in, it may generally be controlled, by a combination of Castor oil and Laudanum. Blood-letting in the treatment of scarlatina has been warmly recommended by some writers, whilst by others it has been strongly condemned, both as unnecessary and injurious. Its employment however must depend upon the character of the disease and constitution of the patient. The symptoms which indicate its use, are, great febrile excitement, a tendency to coma or the existence of inflammation. It should never be employed except when fully indicated and its neglect under such circumstances, cannot fail to lessen the patient's chances of recovery.

Local blood-letting by cups or leeches is in many cases found highly useful and can very often be employed, when the condition of the patient forbids the use of venesection. The application of cold to the surface will be found often highly useful. It has been recommended both by affusion and by sponging the latter mode however is preferable. Its use should be regulated by the feelings of the patient. Should its use produce chilly sensations, it should be immediately dis=continued. At the same time other agents are being employed, internal refrig=erants may also be given. Cold water may be frequently taken, but in small quantities. Ice may be held in the mouth and small pieces swallowed. In cases of small children, the ice should be enveloped in a piece of gauze and the child permitted to suck it. Citrate of Potash and Tartrate of Antimony will also be found highly useful.

The latter agent is particularly adapted to cases of a strongly marked sthenic grade. Should the urine become scanty, mild diuretics should be given, as Nitrate of Potassa or Spirit of Nitric Ether.

The condition of the throat requires great attention. A weak solution of Creasote — Chloride of Soda — Chloride of Zinc, or a solution of Nitrate of Silver — makes the best washes for the treatment of the throat.

The swelling of the throat often also prominent, is very apt to give rise to asphyxia, coma, and apoplectic symptoms caused by the pressure it exerts against the vessels returning the blood from the head. The application of leeches in such cases will be found highly useful.

In the Malignant form of the disease the local treatment proves inefficient. Where the case gradually passes into this condition, its course may sometimes be arrested by the prompt use

of Stimulants and Tonics. Quinine dissolved in one of the mineral acids should be freely given. Carbonate of Ammonia, Capsicum and Oleum Terebinthina should also be used. Nervous symptoms should be combated by Musks, Camphor or Assafoetida. In those terribly malignant cases which threaten to destroy the life of the patient at a very early period, the free administration of Stimulants and Tonics will in some cases support the flagging powers of life, until the deadly agency of the poison passes off.

Sequelae — The Sequelae of Scarlatina are very numerous and not infrequently prove as troublesome and dangerous as the disease itself. It is by no means uncommon that patients pass safely through the primary disease, and are subsequently destroyed by some one or more of its Sequelae, or left to pass through the remainder of their lives, suffering from some form of the

inconveniences to which it so often gives rise. Among the most common maladies which follow it, are, Chronic diarrhoea, Chronic affections of the Eyes which have in some instances entirely destroyed vision. Impairment of hearing is a frequent result of the disease. Paralysis of the muscles of the face sometimes occurs; two such cases have come under the writers notice one of which passed off in the course of two weeks the other, having existed for many years, without any improvement whatever. Dropsy is however by far the most frequent of all its sequelae. It may set in as early as the tenth day or as late as the twenty fourth. When not present at the close of the fourth week, the patient is considered safe from its attack. The dropsy is renal in its origin and inflammatory in its character; the knowledge of which is very important in its

treatment. The urine is generally albumi-
-nous and when subjected to a microscopic
examination, the presence of the epithelial
lining of the tubuli urniferi may be detected.
The treatment of the various sequelae of
scarlatina must be instituted upon general
therapeutic principles, having due reference
at all times however, to their consecutive
nature.

An Inaugural Dissertation on Mortification,

Respectfully submitted to the Examination, of the Provost, Regents & Faculty of Physic, of the University of Maryland, for the Degree of Doctor of Medicine,

by

Andrew J. Johnson
of
Baltimore
Maryland

February 14th, 1855

Mortification

A part of the animal body may lose its vitality while the rest continues to live. We say then that it is mortified; and the process by which this change is brought about is called mortification.

The term gangrene properly signifies the commencement of mortification, or that condition of the affected part which immediately precedes mortification. But it is somewhat loosely employed and not unfrequently used as synonymous with mortification.

This change by which a living organ returns to the state of dead matter, viewed in connection with the changes by which it is preceded and those which

fection it; is one of the most inter-
esting subjects in the whole
science of pathology; and the
treatment to be employed under
these circumstances forms one
of the most important inquiries
belonging to the practice of
Surgery.

If the part affected be one
immediately concerned in the
vital functions, the death of the
entire animal is the speedy
if not the immediate conse-
quence.

If the part affected be one
not directly necessary to life
still if mortification exist
to a very considerable extent,
so great an impression will
be made on the whole system
that the same result will

probably ensue. Otherwise after a certain period of time, another process becomes established by which the dead part is seperated or thrown off from the living. This process when it occurs in the soft parts is known by the appellation of sloughing, and the part seperated is called a slough.

When however it occurs in the hard parts, as in the bones or cartileges it is called the process of exfolliation, and the name of exfoliation is given to the dead bone which has been detached.

Sloughing and exfoliation are accomplished by ulceration

of the living parts in contact with the dead. A thin layer of the living part is absorbed and the dead part is left lying loose on the ulcerated surface.

The period of time required for the accomplishment of the process of mortification differs according to the circumstances under which the mortification takes place; it may be very slow or it may be rapid — it may be almost instantaneous. The period required for the completion of the other process of sloughing varies also: according to the state of the system and the activity of the vital powers finally: according

to the organization of the part in which the disease occurs: thus other circumstances being the same, the sloughing of the skin is much sooner accomplished than that of tendon or than exfoliation of bone; likewise according to the state of the neighboring living parts, without reference to the state of the general system; thus if there is much inflammation in them, the ulcerative process proceeds much more rapidly than when the inflammation is very slight; and hence, as long as the mortification continues to spread there can be not even the commencement of the process of separation.

Where is a case of mortification, of an old man's toe mentioned, which gradually spread even for months up the foot and leg without, the least appearance of a line of demarcation or the least attempt at sloughing.

In the same manner a piece of dead bone may continue adherent to the living even for years. Of, the diseases on which the death of the bone depends can be arrested, as it, sometimes can, the exfoliating process begins immediately and when begun is soon completed.

The separation of the dead part is followed by another series of changes, which terminate in healing a

cicatrization. But these changes are not at all different from those which occur where there is a loss of substance in other ways, and it is not, my intention, to enter into the consideration of them at the present time.

Let us now consider some of the causes & varieties of mortification, their treatment &c. Mortification is described as one mode in which inflammation terminates. A very intense degree of inflammation may lead to this result in any structure, or, in in any constitution; but a moderate degree of inflammation may lead to it, also, in particular cases,

Inflammation of cellular membrane terminates in mortification more readily than inflammation of the skin; and in persons of bad constitution the cellular membrane is more likely to mortify than in others. You see examples of this over and over again in the cases of diffuse cellular inflammation which occur in dram-drinkers. A small puncture of the leg or a compound fracture in which the injury is apparently trifling, may cause inflammation extending gradually from the foot to the buttock; and the whole cellular membrane may in the course of a few days become a

putrid slough. There was a case in which a patient became affected in this manner from a leech-bite; and another in which a similar mischief followed the sting of a bee and both these patients died. They were both known to be intemperate. In the case of the man, stung by the bee, however something may perhaps be attributable to the operation of the animal poison.

If inflammation of the skin terminates in mortification, independently of any antecedent inflammation, and mortification of the cellular membrane beneath, the inflammation

is usually intense; the surface of the skin is of a dark red color and there is severe pain and tenderness. As the inflammation advances the skin assumes a livid appearance: a serous fluid is thrown out under the cuticle which is thus elevated in the form of blisters; and then the skin itself perishes.

If mortification takes place to any great extent the general system suffers. The pulse is feeble, irregular, intermitting: the countenance is anxious, the skin becomes cold: there is an utter incapability of exertion; and

after a few days and sometimes sooner, the patient dies. If the constitution does not suffer in this manner, or if the patient survives the shock, after a few days the separation of the slough begins to take place and this is the first step towards a complete recovery. In cases of diffuse cellular inflammation the occurrence of mortification is preceded by an abundant infiltration of serum. In some instances the serum is of a peculiar yellow color, and, the skin over the whole body, and the tunica conjunctiva of the eyes may assume the same

appearance. The patient looks as if he were jaundiced; but he is not so in reality, there being no bile in the urine.

When mortification of the cellular membrane has begun to take place the constitution suffers in the manner which I have already described.

If the patient survives the shock or lives for some time under it, the mortification of the cellular membrane is invariably followed by a mortification of the skin over it to a greater or less extent.

If there is mortification of the intestine, then it

an infusion of dark-colored serum into the abdominal cavity.

Whenever the part which mortifies is situated internally so that the putrid serum formed round the slough cannot escape, the constitution suffers much more than where it is situated externally; and especially an intermittent pulse and hiccough are often added to the other symptoms. Probably these more aggravated symptoms are to be attributed to the pent-up putrid matter being in part re-absorbed into the circulation.

How is it that inflam-

mation terminates in mortification: or what is the explanation of this phenomenon? This leads to the question as to the nature of inflammation itself. Hunter describes it as consisting in an increased action of the small blood-vessels. If increased action be indicated only by a greater degree of contractility in the coats of the vessels, the theory is evidently wrong: for we learn that the examination by the microscope proves that there is no such thing.

But this is not what Mr. Hunter meant. The vessels of an inflamed part secrete serum, lymph and pus, and build up new structures: in short they do many things which

they do not do under ordinary circumstances: and all this affords an abundant evidence of increased action.

Another theory promulgated in opposition to that of Hunter is that the essential part of it is a debility, or a weakened state of the capillaries; and the propounders of this theory refer to the debilitation of these vessels in proof it.

But I see no reason to believe that the dilated state of the capillaries proves any thing, except that there is something in the condition of an inflamed part which makes a greater supply of arterial blood necessary, and that they have the power of adapting themselves

to those new circumstances. Nor is this power limited to the capillaries. It exists in the arterial trunks in which the capillaries have their origin. Thus in an animal killed by arsenic in whom the poison produces extensive inflamation of the mucous membrane of the stomach and intestines, the branches of the mesenteric are seen dilated to double their natural diameter.

In like manner when muscles are in exercise or when ~~or~~ when a gland is pouring forth an abundant secretion the capillaries become dilated so as to admit the increased quantity of blood which under these circ. of greater activity of the organ is

required; but no one thinks therefore of their being in a state of debility.

The microscope proves something more than the mere dilitation of the capillaries. The blood itself is affected. It loses its globular structure and previously to this the globules themselves are observed to have lost their repulsive properties, and either to agglomerate together, or to adhere to the sides of the vessels in which they are contained, and not unfrequently they seem to stagnate so as to choke up the vessel altogether and destroy the circulation in it. Now if this happens in many vessels the vitality of the part cannot be maintained and thus the oc-

currence of Mortification is easily explained.

There is however something more than this in some instances. For example there is a case of inflammation of the cellular tissue of the scrotum. The cells are filled with serum. They are fully distended and the skin is on the stretch. If nothing be done to the part, the cellular membrane first and the skin afterwards will mortify to a great extent. But make some incisions with the point of a lancet and the serum escapes in sufficient quantity to relieve the tension and the mortification is in a great measure or wholly prevented.

Treatment. Whatever tends to lessen the violence of the inflammation ought to be given or done to the parts.

of the mortification, and on these grounds the patient ought to derive benefit from the abstraction of blood.

But, on the other hand the abstraction of blood, by which the life of a part is supported, if carried beyond a certain point, is of itself an adequate cause of mortification; and the abstraction of even a small quantity of blood may lead to this result under certain circumstances.

It is not by principles alone that we can learn how to act in this dilemma. Experience is one of our best guides, and on this as on many other occasions, the practical surgeon will have a great advantage over the mere scientific.

If the information be in-

tense, the pulse strong and full, the countenance flushed and the skin hot; that is, if there are marks of great general excitement of the system, it is probable that the patient will derive benefit from blood-letting; and, if we have reason to believe he is of strong constitution, blood may be drawn to considerable extent.

But there are cases in which blood-letting would be as mischievous as useful under the circumstances just mentioned. If the patients habits be small and feeble, and the constitution impaired by too free indulgence in drink and other debilitating practices, the abstraction of even a moderate quantity of blood will hasten the

progress of the mischief; and if bleeding be employed to any considerable extent will certainly destroy what little chance he might otherwise have of recovery.

In cases where it is difficult to draw the line of distinction caution must be used; watching daily the operation of the remedies you employ; and persevere in one mode of treatment or adopt another according to the effect produced: at one time it may be proper to take away a moderate quantity of blood and almost directly afterwards to have recourse to an opposite mode of treatment.

Hitherto I have only spoken of blood letting; but this of course involves much other treatment.

Where bleeding is proper, active purgatives will be proper also, as well as saline and diaphoretic medicines. Where blood-letting is improper, though aperient medicine may be required, active purgatives should be avoided. The patient should be allowed such diet as his stomach is capable of digesting: varying the stimulus which it may be necessary to use according to the character of the symptoms, and his previous habits.

Decoction of bark, quinine and other tonics may be useful under certain circumstances, but little reliance is to be placed in their use while inflammation and mortification are going on. They often do more harm than

the Stomach and interfering with digestion of food.

At a later period, however when the progress of the mortification is stopped and the sloughs are beginning to separate, there is no doubt of their being eminently useful. Opium is useful under certain circumstances, as where there is severe pain; or where the inflammation or mortification depends on the operation of a specific poison.

Where there is infiltration of serum into the cellular membrane, - which operates in producing mortification - the evacuation of serum and the consequent relief of tension by scarification or incision, will

go far towards preventing an extensive mortification in all cases, and will prevent it altogether in a great many. But in such cases it is not always necessary to make scarifications or incisions. Mere punctures are not unfrequently sufficient; especially in the early stage of the disease,—where there is that state of things which may lead to mortification, but where mortification has not actually taken place.

When mortification has taken place to certain extent; its progress arrested; and the system survives the shock, what further local treatment must be used? Little, if any. The separation of the slough is a natural process.

It is usual to apply stimulating ointments; Solution of Chloride of Soda; stimulating poultices and other things of this kind. But I doubt if separation will go on just as fast, with simple treatment such as that of bread and milk poultice, or a linseed poultice, lint &c. The constitutional treatment is of much more importance than any topical applications. Bark may be given with advantage: but the discreet administration of wine and a nourishing diet is of more importance still. No rule can be laid down: You must study the existing symptoms and act accordingly.

A Report.
of
Twenty one Surgical Clinics,

Submitted to the Consideration
of the
Provost, Regents and Faculty
of the
University of Maryland,
as
An Inaugural Dissertation

For the degree
of
Doctor of Medicine,—

By
Hiram Greenwood,
of
Maryland

1850.

Eye Clinic

October 11th.

Case 1st – Inflammation of the mammary gland in a white woman – Bandaged so as to give support to the breast – lead plaster directed for its soothing effect, and bowels to be kept open by aperients.

Note – Inflammation and swelling of the breast may be produced by various causes such as Cold, by stimulating a diet used in suckling, or by not keeping it sufficiently supported. During lactation the milk if allowed to accumulate will stop up the lacteal ducts and an abscess will result, which may require to be punctured.

Case 2nd – Fistula in Ano – in a young German – the fistulous opening laid open by the bistoury – the finger introduced into the rectum to make a careful exploration, which the surgeon should not fail to do.

His chest examined by percussion and found to be tending under Phthisis – placed upon tonic treatment

First Clinic.

Note - There are three forms of fistula. The complete fistula, which opens externally, near the anus, and internally into the bowel, above the Sphincter muscle - The blind external fistula which has no opening into the bowel although it nearly reaches its outer coat and the blind internal fistula which opens into the bowel, but not externally, and at times may be discovered by a redness and hardness near the anus - The treatment in all these forms is the same, to lay them freely open, thus **all** the intervening parts being divided, the fistula and the bowel are converted into one cavity - the wound being kept expanded until it is made to granulate and heal from the bottom and in most cases a cure effected.

Case 3d - Necrosis of tibia - in a small Black boy - the disease portion terminated by a free incision being made down to the tibia - the opening in the tibia being enlarged by the gouge and mallet, and the necrosed portion removed, - the wound then dressed with lint

First Class.

Note – Necrosis is most likely to occur in scrofulous habits, and most likely to occur in this part of the body – may arise also from injuries, and may be the result of syphilitic taint, – happening though mostly among the poor and ill fed class of people – seldom occurring where good diet, attention to cleanliness and no hereditary taint exists.

Case 4th – Strained ankle joint – young girl – supposed to be caused by dancing. The joint does not seem to be much involved. The disease is between the tendo Achillis and the joint – An incision was made between the tendon and the joint, and lint introduced, to give exit to any matter that might form. A poultice to be applied, – bowels to be kept open and perfect rest to the joint, so that it may not be irritated – for the most important part of the treatment is to keep perfectly still and quiet, and trust to the salutary effort of nature.

Note – In all cases where the injury is close to

First Clinic

to the joint there is danger of anchylosis - in this case it may not occur the patient being young and in good health - she may therefore be cured, though there is considerable danger of a stiff joint.

Case 5th - Fistula in Ano - in a colored man - Operated on - Chloroform being used - the finger was introduced into the rectum and the bistoury into the fistula until the point touches the finger - then drawn down and dividing the parts completely, making a free opening - The fistula then kept open by lint - there being some hemorrhage a compress and bandage was applied.

Note - There are very few diseases more painful than this one especially when the patient goes to stool the parts being largely supplied with nerves and arteries - One thing must be borne in mind, always to explore the rectum with the finger, and if any pouch or fistula is found it must be opened and free exit given to the matter that has formed.

First Clinic

Case 6th – Coxalgia – a disease of the hip joint – has a negro boy, – of long standing – the issue to be formed – and patient has been bristly, purged with Compound Jalap powder – composed of one part Jalap, and two of Cream Tartar.

Remarks – This disease usually begins by slight pain and some little lameness – the seat of pain is often the knee, but when the cartilages of the hip joint become involved, the pain will be severe – there is no disease perhaps in which more mistakes are made, than in this. When the limping begins the attention of the parents is called to it, and the physician consulted, who in many cases pronounces it Neuralgia or Rheumatism, and the child is allowed to run about, until it is in many cases too late to do any good, when the real disease is found out – If a child is brought with these symptoms the first reason for fearing hip disease. In such cases, perfect rest must be enjoined, for if the patient is allowed to run about, the disease cannot be arrested the joint is destroyed.

First Clinic

the acetabulum and head of the femur are absorbed, the limb shortened and the pelvis tilted to one side, to accommodate itself to its new relations.

If the disease is discovered in time, and the patient kept perfectly quiet, a perfect cure may generally be effected, although it seems to the parents a long time to keep the child thus confined.

Second Clinic

Oct. 14th.

Case 1st - Paronychia or Whitlow - in a negro woman - on the index finger of the right hand. Said open down to the bone, so as to give free exit to the matter and poultices to be applied.

Remarks - Paronychia is an inflammation and thickening of the periosteum covering of the bone, which has the same relation to the bone that the skin does to the external parts of the body - This disease is often caused by bruises, or something that injures the periosteum - The cure consists in laying it freely

Second Clinic

open, for if allowed to grow, the matter will burrow among the tendons and muscles, and disastrous results may follow. The skin in the palm of the hand being very thick, these gatherings will not break as in other parts of the body, and the tension of the part causes severe pain

Case 2nd – Necrosis of the spine of the Scapula – In a small negro girl – A probe was introduced to see if there was any loose bone – the portion distinctly felt, but not loose enough to be removed.

Case 3d – Catarrhal Conjunctivitis – in a white man from the Mine banks in the County – is of long standing, – caused by cold – touched with a solution of nitrate of silver gr ij to ℥j aq. The watery solution of opium to soothe the eye – and the Red. precipitate ointment to be used to prevent the lids from sticking together – Blisters to be applied behind the ears, and the bowels to be kept open by aperients.

Second Clinic

Case 4th – Inflammation of the eye from injury – In a small negro girl – from the injury a tumor had resulted on the upper surface of the eye ball – which was lanced – the water solution of opium to the eye, and calomel to promote absorption of lymph.

Third Clinic.

Oct. 18th.

Case 1st – Examination of negro woman operated on for paronychia – is doing well – the finger or joint will be stiff or anchylosed, but this cannot be avoided.

Case 2nd – Conjunctivitis – in a white man – This case was of an obstinate kind and to supplant the diseased action, it was touched with the sulphate of copper in a solid form – In diseases of the eye it is necessary to resort to several remedies, as often one will succeed when the first used has failed. And in some cases even the best directed remedies will fail.

Third Clinic.

Case 3d – Bubo in the right groin – in an Irish Hostler – The tumor laid open to give free vent to matter, that would otherwise accumulate and burrow among the muscles. Poultices to be applied – gr v. Blue Mass three times a day – No animal food except at dinner – and rest.

Case 4th – Fistula in Ano. in a Coloredman – has been under treatment, – examined, and is improving – there being a small sinus it was opened – continued on the same plan of treatment.

Case 5th – Necrosis of tibia – in a small negro boy – Examined – probe introduced to see if any portion of necrosed bone was loose – there being none, but was painted, and same treatment continued, with Syr Ferri. Iodid. gtt + three times a day, and generous diet.

Case 6th – Fistula in Ano – in a white man

Third Clinic

Examined – the finger introduced to see if there is a free exit to matter – is impressive – seems to be laboring under pulmonary disease – from which it is likely he will not recover – chest percussed, giving dulness on left side – is taking cod liver oil, a tablespoonful three times a day

Case 7th – Indolent ulcer on tibia – in a youth who is from a malarious district, shown from his yellow and anemic appearance – Nitrate of silver gr x. ag ℥j was a wash was ordered, and pills of iron as a tonic

Case 8th – Operation for Phymosis – in an Irish youth – is congenital – the stricture is relieved by dividing the prepuce – which should be done by introducing a director and then using a probe pointed bistoury to divide the prepuce, a stitch put in on the dorsum to draw the parts together – oil and lint to parts.

Case 9th – Retention – Sac, bistoury passage

Third Clinic.

which must be opened to keep the matter from burrowing among the muscles - Poultices to be applied and Dover's powder at bedtime - Note - This case is of a very obstinate character, the matter seems to be confined down to psoas muscle, and follows down to the groin - which in many cases comes from the spine - and if this should exist it will prove fatal. From the patients inclination to one side the matter may point in one groin only, but if the patient should lie on his back may point in both, - or after one gets well the other may point - in all these cases issues and setons are beneficial. These cases are tedious to heat and will require careful attention - If the spine is involved to any extent unfavorable results may be looked for. But nature's resources even some of these cases seems to be surprisingly great.

Fourth Clinic.

Oct 21st

Case 1st - Tumor on angle of lower jaw - In an old lady from the Country - the tumor was

Fourth Clinic

removed, arteries tied, the edges drawn together by stitches, dressed with lint, and bandage applied under the jaw.
Note - This was a fibrous tumor, or does not present the character of a malignant kind. These tumors are mostly called warts - are slowing growth - The proper treatment is to remove them - But if the tumor should be scirrhous, there will no good result, unless every particle is removed, which is impossible in many cases - And even when removed, the blood has often been poisoned to such an extent, that a cure cannot be effected.

Case 2nd - Bruised toe - in a negro woman - appears slow in healing - The sore touched with Nitrat Argent. - Bowels being constipated - to have Mag. Hydrarg. and Gold. Sulph. Antimon. c. c. ind. Her constitution not being in a healthy condition therefore will be slow in healing.

Case 3d - Ulceration of the Cartilages of the

Fourth Clinic

knee joint, or White swelling — in a German Man — The treatment in such cases is to keep the joint at rest. To effect this purpose, nothing is better than the common starch apparatus well fitted to the joint. In this case the mischief will be slow in repairing, his constitution being scrofulous and the disease of long standing. Early attention in such cases is of the greatest importance. And in most cases a stiff or anchylosed joint is all that can be expected.

Case 4th — Fracture of the humerus in John Hagen, from Alexandria, Va. This patient was in the Infirmary last winter, when an effort was made to bring about union by placing the fractured ends in apposition, but owing to the longitudinal of the fracture, it did not succeed. As soon as his general condition admits Prof. Smith designs performing the operation for false joint — which is to expose and saw off the fractured extremities of the bone, to bring together the ends and hold them in apposition by a silver wire until union takes place.

Fourth Clinic

Case 5th - Fracture of the Radius in a painter who fell from a church (St Johns). In treating fractures of the Radius and ulna, Rotary motion of the hand must be preserved and to effect this the bones must be kept in their proper relation to each other, by splints and bandages - For this ~~qu~~ splint with a ridge in the middle to keep the bones apart may be used.

Fifth Clinic

Oct 25th

Case 1st - Syphilis - in a black man - Has both Chancre and Bubo - The chancre is improving - the bubo suppurated sufficiently to be opened & taking Iodid. Potassii gr v. three times a day and bubo to be poulticed.

Remarks - Bubo is nothing more than an internal chancre - The matter from the venereal ulcer is carried by the lymphatic vessels to the glands in the groin - Sometimes only one gland is affected - But generally more than one - Very often an entire chain is in a state of inflammation. When these glands are enlarged and about to suppurate in a

Fifth Clinic

scrofulous habit, it will be of an obstinate character and slow in progress. The same result will follow if the system has been worn out by the use of mercury. Indeed sloughing goes on in many such cases to such an extent that it may require months to heal.

Case 2nd – Examination of the Irish Youth on whom the operation was performed for Phymosis. Is doing well, and has a decided better penis than he could have without the operation.

Case 3d – A tumor or boyl like swelling resembling Fistula Lachrymalis under the eye of a small white girl – Is of strumous diathesis, and requires tonic treatment – Placed on Syr. Ferri Iodid. gtt x three times a day, and generous diet. In such cases when you have this anæmic condition existing, the system is more likely to suffer, than if it was in a good constitution. When the wants of tone exists and there is not much inflammation present – tonics are indicated.

Fifth Clinic.

Case 4th – Catarrhal Conjunctivitis, in a white man – Argent. nitrat grij ℞ ʒ ss to be applied to the eye. Blisters behind the ears and to be reapplied when healed – and aperients

Case 5th – Examination of the small negro girl with necrosis of the spine of scapula. Not sufficiently detached to be removed at present.

Case 6th – Examination of the white man with ulceration of the cartilages of the knee joint. So wearing the starch apparatus – is improving and the disease is probably arrested, although anchylosis will result.
Note – In diseases of the joints perfect rest must be maintained, and for this there is nothing better than the starch apparatus especially the moovable apparatus.

Clinic Sixth

1st Case – An Irishman with Psoas Abscess – the matter seemed inclined to pocket, and to come

Sixth Clinic

this an incision was made to keep it from burrowing among the muscles of the groin
Remarks of Prof. Smith – The matter that is seen pointing in the groin is formed upon the lower part of the Dorsal Vertebra, and follows the course of the psoas ~~abscess~~ and iliac muscles down to the groin – If you make firm pressure on the abdominal muscles matter is seen to ooze from the opening in the groin – but it is not formed there – This abscess will be slow in healing, because it keeps up too great a drain on the system. And he being of a scrofulous habit, the chances are at present against him = His strength must be kept up by tonics – and rest – If he does not keep quiet the healing process will be retarded. The drain is very great in this man's case, over which medicine has not much effect = which makes the result in his case doubtful.

2nd Case – Examination of white girl with diseased ankle joint, shown as before the class at the first Clinic – starch apparatus applied to maintain rest of the joint – She being of a good

Tenth Constitution

constitutions, the case may never happily.

3d Case – Examination of the old lady from the country, from whom a tumor was removed at the 4th Clinic – is doing well and but with little deformity – Mouth drawn to one side but hardly perceptible.

4th Case – Examination of the negro boy, from whom a portion of necrosed tibia was removed – Is improving and will soon be cured.

Note – In all such cases where the diseased exists, healing cannot take place, until it is removed – Generally nature must be assisted, as in this case, by cutting down to the bone, and removing the necrosed portion.

5th Case – Operation for false joint – on the low Negro – for non-united fracture of right humerus – Chloroform was used, but the patient was not fully under its influence – the incision was made down to the bone, the muscles dissected away, the fracture exposed, and the extremities sawn

Sixth Clinic

off – the two portions of bone, being placed in apposition, were held in place by a silver wire passed through them, and its ends twisted together and left sticking out of the wound, the muscles were sewed, and wound dressed – two splints were applied on the outer and inner side of the arm – The outer splint the longest, grasping the shoulder, as it was important that the lower fragment should be supported. – bandages were applied above and below the wound, so that it could be dressed without disturbing the callus that will form if the operation be successful Remarks of Prof. Smith – The apparent difficulty in this case seems to be to get the wire away, but it will be removed without much trouble, as Nature always has a tendency to throw off anything that seems to be foreign, and ~~that~~ there is not much likelihood of its producing much irritation, as it will not corrode it being small and there being nothing in the bone or muscle to corrode it. If this succeeds happily, of which there is not much doubt, it will be the means of saving the arm, it being of more to him as it is. The arm and hand are much reduced, and

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of no sort of use, besides his health was suffering meanwhile, and it would probably produce dangerous results if let alone. In saving such such an important member as a hand and especially the right hand, we are ~~warrant~~ justifiable in resorting to any expedient that would not endanger life. The hand was worse than useless as it was, now it may and doubtless will become a very useful hand

Seventh Clinic.

Nov 1st.

1st Case – A Sailor with syphilis – has been under treatment in the house – This was the first time he appeared before the class – He suffering from stricture – Has had hemorrhage from the Urethra. A Catheter being passed, the constriction was found to be in the prostatic portion of the Urethra. A flexible bougie was introduced and left in the Urethra, to dilate the Canal – placed on Iodid Potassii gr v three times a day, and an injection ordered of Nitrat Argent gr ij aq. ℥j.

Seventh Clinic

2nd Case — A young man supposed to be labouring under disease of the Prostrate gland. The Catheter was introduced to draw off the urine, and explore the parts, and also examined per rectum — the prostrate gland was found enlarged — Patient suffers considerable pain in passing urine — also pain in the small of his back — The patient was supposed to be addicted to masturbation — Cups were ordered to be applied to the spine and an aperient of Magnesia and Rhubarb

3d Case — A white man with ulceration of cartilages of knee joint — has been before the class several times — is improving — rest of the joint is maintained by the starch apparatus — His bowels are kept open by the Cathartic mixture of the house — Rest and generous diet ordered.

4th Case — A black man with abscess in the hopliteal space, is of a strumous habit — a free incision made into the abscess and poultices ordered, also Iodid Potash gr v three times

Seventh Clinic

a day

Remarks of Prof. Smith - The occurrence of such abscesses is very frequent in the lower extremities, often the slightest injury is sufficient to produce them, and more especially in a strumous constitution. They require in many cases the best directed treatment to effect a cure - the remedies must be directed to the general system.

1st case - A white man with bubo - Has been before the Class - went out too soon, caught cold, and now the glands of the groin are much swollen, and an abscess is forming; ordered to be poulticed, and a caustic issue to the spine.

Case 2d - Black man with bubo in right groin - Bubo opened - poultice ordered and to take gr v Iodid Potass three times a day - attention to diet, meat once a day, and rest.

Eighth Clinic

1st case - John Hegan, - on whom the operation for false joint was performed, was examined - it was found to be uniting slowly, callus was forming, and will result happily.

2nd Case - The Black man with Popliteal abscess was examined, found to be improving - but need to keep the incision expanded - Same Constitutional treatment ordered.

3rd Case - A Black boy with hip disease, - Has been before the Class - Has a caustic issue - and taking antiscrofulous remedies, and is slowly improving

4th case - This is an Irish man - Has been before the class - The urethra was cauterised with Nitrat Argent, the best remedy that can be employed.
He makes 9 a. milk.
There has been retention of urine in this case, which may be caused and doubtless is, by chronic inflammation of the prostate

Eighth Clinic.

portion of the urethra. There are several causes for retention of urine — it may be caused by a morbid condition of the urethra, including spasmodic and permanent stricture — by contraction of its orifice — by impaction of stones or other bodies in it, and the presence of cicatrices, abscesses, tumors, also by palsy of the bladder. When stricture is of a spasmodic character it is owing to the spasm of the muscles or muscular fibres surrounding the membranous portion of the urethra. Stricture may also exist in certain acute inflammations and may be termed acute or inflammatory stricture

5th case - a white man with diseased prostate gland. Examined - The class has seen him twice before - the prostatic portion cauterized with the nitrate of silver.

6th case - Extirpation of a fibrous tumor in the breast of a negro woman - too small arteries were taken up - and the wound drawn together with strips of adhesive plaster, lint and bandage

Eighth Clinic

applied.

7th Case – A Black man with fistula in Ano – The patient placed on his hands and knees – The nates drawn asunder by an assistant – the finger then introduced into the rectum – the fistula explored with a probe to find the opening into the bowel – the probe pointed bistoury then introduced into the fistula until it touches the finger in the rectum – then drawn downwards dividing the parts intervening between the fistula and bowel – The wound was then kept open by lint inserted between its lips.

8th Case – a colored man with fistula in Ano – has been before the Class, and operated on – Is improving slowly, owing to his general health – Is of a scrofulous habit and is taking Iodied Potash gr v. three times a day.

Case 9th – a negro girl with an inflamed eye – Has been before the Class – a tumor

Eighth Clinic.

had formed on the upper surface of the eye-
and had been previously lanced - Is improving
slowly, owing to her scrofulous constitution.
Has been under treatment for some time
and is very obstinate in healing. Watery
solution of Opium ordered for its soothing
effect and to wear a shade to protect the
eye from the light

Ninth Clinic.

Nov 8th.

1st Case - A white man with nævus, forming
a large tumor on the right side. It gives him
pain, but from its large size was in the way.
The patient was anxious to have it removed -
But nothing was done with it at this time.

2nd Case - Fracture of tibia and fibula in
a white man, from the Baltimore Alms House -
Had been under treatment there for some time,
but it had not united, it being the worst kind
of a compound and comminuted fracture.
Several pieces of bone had been discharged

and was still discharging small pieces. His general health has suffered considerably. The leg was set in Prof. Smith's apparatus, - which was well adapted to this case - relieving the heel which had sloughed considerably from all pressure.

Remarks by Prof. Smith -

This new apparatus will be found highly useful in many cases, for instance, when there is shortening of the heel, and where frequent dressing is required owing to free discharge - It is also valuable from its cheapness, as it consists only of a piece of board with two angles - one to adapt it to the instep, the other to the knee. The leg is fastened to this by bandages, and the foot kept in its place by sticking plaster, carried from the foot to the apparatus. Any wound may therefore be easily dressed. This is not designed to supersede the old apparatus now in use, but merely to be used in such cases where it can be better adapted.

3rd Case - An Irish woman with fistula lachry,

Ninth Clinic

-malis - A probe was introduced into the duct - to the nose - by opening the orifice with a probe it may remain open or may close again. Patient ordered to return in a week's time.

Remarks of Prof. Smith - Obstruction of the lachrymal duct, is known by the overflowing of the tears - If this condition is suffered to go on. Inflammation is set up and an abscess is formed. In very neglected cases the lachrymal or turbinated bones may become carious but this seldom occurs. The treatment will differ according as it is acute or chronic - If acute, you may bleed, leech or cup the temples - purge, apply cold lotions and poultices. In many cases you will not succeed with the best directed remedies. Then resort must be had to the style or gold tube.

4th Case Operation for Strabismus - In a girl sixteen years old - the patient being seated. Her head supported by an assistant, the eyelids kept open by a silver wire speculum.

Ninth Clinic

The conjunctiva being carefully elevated, and divided with scissors, the inner rectus muscle was divided. In dividing the muscle care must be taken to divide all its fibres.
Remarks of Dr Smith.
Strabismus appears to be in most cases some weakness of sight, and want of a proper adjustment between the two eyes. The mechanism by which the squint is produced is owing to the antagonism existing between the inner and outer rectus muscle. The inner predominates in force and draws the eye inwards. Occasionally both eyes squint, but this does not very often exist. There are several causes of this disease. It may be congenital - may be caused by imitating those who squint, which is often the case, - or by improper use of the eyes, as using one eye too much, and in this way the habit is persisted in, until the malformation or squinting is produced. Let it exist from whatever cause it may, the only cure is to divide the inner muscle.

Ninth Clinic

5th case - Examination of stricture in a Sailor (whitemaw). The urethra had been Cauterised before - improving and will be cured.

6th Case - A negro man with fistula in ano - has been before the class - at the last Clinic a sinus was discovered and opened, and another found to day and also opened - Is on Iodid Potassii gr v. three times a day, and bowels regulated by aperients.

7th Case John Hegan, on whom the operation for false joint was performed, Examined, and Callus found to be forming - He looks better - Callus not sufficiently firm to allow the wire to be removed

Tenth Clinic

Nov. 11th.

1st case - A scrofulous abscess and necrosis of the sternal cartilage in a Black boy (Cum) A probe introduced to

Tenth Clinic

find to what extent the cartilage was diseased - The sinuses opened to give exit to matter, that might otherwise embarrass the heart's action, and poultices ordered -

2nd Case - Coxalgia, - in a small negro boy (John) of long standing - Ordered Prot. Chloriid. Hydrarg - Scammony - Rhubarb aa grs v and Syr. Ferri Iodid gtt x three times a day; A Caustic issue to be applied, and joint kept at rest by starch apparatus - Remarks of Dr Smith - When I have such cases as this to treat, if I can keep the patient still, I can expect a favorable result in a majority of cases - I often have to have them strapped down, - placed on small wagons, and carried into the open air daily - This seems to be hard treatment for such little patients, but is the only sure way to be of any lasting benefit - If you allow them to run about, your other treatment will be of little use - for as long as the joint is allowed to be moved,

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irritation is kept up, until the joint is completely disorganised, and the patient limping for life, with one leg two or three inches shorter than the other.

3d Case – A negro boy with Coxalgia – Has been before the Class – Examined – The disease had been allowed to run on too long, and treatment now can only be palliative – Ordered to keep quiet – and caustic issue to the hip –

4th Case – Distortion of the Spine in a negro man – Many causes tend to produce this disease – the most frequent is the scrofulous diathesis – at times it is caused by Chronic pleurisy and by bearing heavy weights on one side – Nothing could be done in this case but to allay irritation for which it was ordered to be kept in the recumbent position

5th Case – An Irish woman with Fistula Lachrymalis, Has been before the Class – A

Tenth Clinic

probe was introduced to dilate the passage into the nose, The nail headed style was then introduced, and patient ordered to return in a week.

Case - Catarrhal Conjunctivitis in a white man from the Copper Mines - is of an obstinate character and of long standing - ordered to be blistered behind the ears, to be purged with the cathartic mixture of the house, and sol. Nitrat Argent. gris - ℥j as a wash for the eye - also watery solution of Opium for its soothing effect.
This man has been laboring under this disease some time, and under the most unfavorable circumstances to get well - Being under ground where no light but that of a lamp is used, and also exposed to the Copper dust that accumulates in those Mines.

Eleventh Clinic

Nov 15th

1st Case - Amputation of a portion of the

Eleventh Clinic

hand - in a young man employed in a mine. back - The thumb and part of the index finger preserved - The rest of the fingers and a part of the metacarpal bones removed. The parts removed, the vessels secured, and the wound drawn together as well as could be with adhesive strips, and to have an anodyne.

2nd Case - Paronychia in the right thumb of a small boy = the finger very much swollen. The only cure is to remove the nail - then apply the Potassa fusa, cauterising the parts well - this is very painful for a time but is the best way to effect a cure.

3rd Case - Fracture of the radius in an Irish hostler - Caused by the kick of a horse - The angular splint on the outside, and one having a ridge in the centre to keep the bone into proper relations, also to preserve the rotatory motion of the hand, which would be destroyed, if this was not done. The hand and arm was then bandaged.

Eleventh Clinic

4th case - A negro girl with necrosis of the scapula - Examined - a probe introduced to see if any loose portion of bone was there, a small piece found and removed with forceps - is of a scrofulous habit - Has been before the class.

5th Case - A small negro girl with a tumor on upper surface of the eye - Has been before the class - The tumor had been previously lanced - is improving.

6th Case - A white girl with diseased ankle joint - Has been several times before the class - Did not appear to be improving much - lint introduced to keep up the discharge.
Remarks of Dr Smith.
The injury is said to have been produced by dancing, which may in part have given rise to it. There is doubtless a scrofulous taint existing in her constitution for it is not likely, that her ankle would have remained in this condition so long.

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if scrofula did not exist. This has been a very obstinate case since she came into the House, and she had been in in treatment before. The situation of the injury is adverse to its being cured rapidly, it being where it cannot be laid open freely, situated between the joint proper and the tendo Achillis, But in all these tedious cases time and rest work wonders for the reputation of the Surgeon

Twelfth Clinic.

Nov 18th.

1st Case - Fractured leg in a middle aged woman, fracture below the knee - Had been in the house for some time - brought before the Class to show how the starch apparatus is made and applied - suitable strips of binder's board, being smeared with starch and wrapped with a roller, were applied to the leg and retained by bandages - The boards soon become adapted to the leg and firm enough to retain the bone in its

place. This apparatus enables the patient to turn in bed, thereby relieving her from the steady position she would have to maintain if this was not done.

2nd case – a negro boy with Coxalgia – has been before the class – The boy being young and the disease taken in time, it was thought a cure would be effected – But the joint must be kept still, and to promote this, the splint apparatus was applied from the superior spinous process of the ilium to the middle of the femur

3d Case – Nevus – in a white man – Has been before the class – forms a large tumor on the right side – The patient came into the House for the purpose of having it removed. But was advised by Prof. Smith, to let it remain – as in removing it, so much of the integument of the abdomen would have to be lost, as to endanger life.

Twelfth Clinic

4th case - A boy with fractured arm - Has been under treatment before he entered the house - It was a compound fracture and of a very bad character. Mortification being about to occur, was ordered to have the part exercised daily. Had ~~ordered~~ also a sore on the head, which was ordered to be dressed with simple cerate.

5th case - Hydrocele - In a young German. The testicle being held out of the way, the membrane hooked up, and punctured with a lancet then the water allowed to escape and a tent introduced, and ordered to remain in a sufficient length of time to excite adhesive inflammation. Dr Smith remarked that he had never failed in effecting a cure when the tent was used, but had often failed when injections were employed.

Hydrocele is a collection of serum in the tunica Vaginalis - the swelling is pear shaped and is distinguished from inflammation of the testis by its solidity, weight & by its

Twelfth Clinic.

being more or less transparent. It differs from Hernia, by its neck at the site of the cord, by its commencing at the bottom of the scrotum, by its fluctuating, and by not dilating, when the patient coughs. The causes are not well understood – sometimes it follows inflammation of the testis, sometimes from strains, but in most cases there is no obvious local cause –

6th Case – A negro man with a tumor on the umbilicus – the tumor considered not to be scirrhous, and to supplant the diseased action cauterized with solid Caustic Potash.

Thirteenth Clinic.

Nov 22nd.

1st Case – John Hogan, on whose thigh the operation for false joint was performed. Examined and callus found to be forming – His general appearance improved, and greater probability of a cure being effected.

Thirteenth Clinic.

2nd Case - Young German - a portion of whose hand was amputated - Examined, and found to be doing well - will have the use of his thumb and forefinger and thus have the power of grasping.

3rd Case Negro boy with Coxalgia Has been before the Class several times The diseased leg compared with sound one and pronounced to be improving.

4th Case - Boy whose finger nail was removed - Examined and improving - The disease has been arrested and will soon be well.

5th Case - Irish hostler with fracture of fore-arm from Kick of a Horse - is improving and union will soon be complete.

6th Case - Operation for cancer of the breast, in a Negro woman - Chloroform used - The woman had had two tumors removed previously for cancer of the breast if the glands in the

Thirteenth Clinic.

axilla are enlarged, no good will result from an operation, as it shows that the system has become affected by the propagation of the poison from one set of glands to another.

Remarks of Dr Smith.

Scirrhus usually begins as a hard, circumscribed, moveable swelling in some part of the breast. And of course in a bad constitution, the skin being yellow, and of that peculiar tint which is characteristic of the disease. In many cases it is not painful to the touch, and at times only discovered by accident. After a short time it begins to increase in size and the patient has paroxysms of sharp, shooting pains which may be more violent at the menstrual period, and this goes on until the whole gland becomes involved. The glands in the axilla and neck become affected. And after a longer or shorter time the tumor in the breast breaks and becomes an open sore. The disease may penetrate the ribs and pleura and death then result. The only cure is the complete

Thirteenth Clinic.

removal of all the cancerous part. The thousand cases of various diseases only convert it into an ulcer and hastens the patient's death.

Fourteenth Clinic.

Nov 25th.

1st Case - Paronychia in a white man - the middle finger is very much swollen, and is lost from neglect. This disease is always curable if promptly treated. The finger must be opened to give free exit to matter. The finger will require amputation.

2nd - The black woman on whom the T applied the stench apparatus before the class was examined and found to be improving - union is complete and will soon be well.

3rd Case - The woman whose breast was removed at last Clinic was examined and found to be doing well, and at present no sign of the disease is returning.

Fourteenth Clinic.

4th Case. Examination of the Irish woman with fistula lachrymalis - is wearing the nail headed style and is improving - by keeping the style in, and its keeping the passage, may be cured.

5th - Case - Examination of the boy (Cam) with ulceration of the sternal cartilage - is less swollen than when the class saw him last - the tumor freely opened. This boy's recovery is uncertain, as the seat of disease is near the two most important organs (Heart & lungs) on which life depends - but by not allowing matter to accumulate between the muscles and the sternal cartilage, his chance will be better.

Fifteenth Clinic

Nov 27th.

1st Case - William Richardson - fracture of leg happened on day of the Election. He has been in the house since then. The seat of fracture being in the lower part of the femur, and compound and comminuted, might have been properly

Fifteenth Clinic

Amputated - But union has taken place - The ball is still in the leg, or at least has never been found, and is supposed to be lodged in the bone. There are few such results as this on record. The ball seems to give the patient some uneasiness, but no unfavorable results has yet demanded its being sought for and removed, and there is not much danger of its doing any injury - if it should it can then be cut for.

2nd Case - A yellow Man with fistula in ano Has been before the Class - Has been operated on and is slowly improving owing to his general health - is on antiscrofulous remedies.

3d Case - Black Man with fistula in ano - Has been before the class - is improving and will soon be well.

4th Case - Necrosis of cervical vertebra in a small black boy (Jacob). This boy is of a scrofulous diathesis, and there is

Fifteenth Clinic

very little chance of his recovery. The only thing to be done in this case is to keep the patient in the recumbent position. The disease has gone too far to arrest its progress, for the neck is perfectly stiff, the larynx and pharynx have become affected, for his voice is altered and he cannot swallow well. Ordered to have Protō chloride Hydrarg gr ij Rhei gr vj. – neck to be painted with Iodine, Syr. Ferri Iodid gtt x three times a day

5th case – Small white boy with fracture of the forearm – Has been before the class – Examined, and found to be improving slowly. He had considerable injury besides his arm – His head was cut, and of a bad character.

Remarks of Dr Smith –

The danger here is anchylosis, and to prevent this, he must have his arm manipulated every day three or four times, it will inflict pain, but it must be done and well done to effect any good.

Where fractures are treated care must be

Fifteenth Clinic.

latter to give it daily the necessary motion, so as to prevent anchylosis, which when it occurs the Surgeon is blamed for, and in many cases deservedly - for to preserve the patient from a little pain, the Surgeon fails to cure.

Sixteenth Clinic.

Decr. 2nd.

1st Case - Examination of the small boy on whom the finger nail was removed with Paronychia - is entirely well.

2nd Case - Amputation of the middle finger in a White man from neglect by not lancing the finger in time. The finger amputated at the last phalangeal articulation. The patient being under the influence of Chloroform. The amputation was performed by making two semicircular incisions, one on the dorsal and the other palmar surface of the hand. After this was done a small piece of necrosed bone was discovered and

Twelfth Clinic

removed. The wound drawn together by adhesive strips and bandage applied.

3rd Case. Examination of the German Youth, who had a portion of his hand amputated from an injury, received in a bark mill. – Is improving rapidly, and will have the use of his thumb and four fingers

4th Case – Examination of John Hegan, on whom the operation for false joint was performed. Union is complete, and the arm saved. His bowels being constipated, was ordered to have Aloes and soap pills and generous diet

5th Case – A negro man with syphilitic bubo in the right groin – The class have seen him – The bubo kept expanded with lint, and to take Mag. Hydrarg. gr v three times a day.

6th Case – Examination of the Irish Navvy's fracture of the fore arm – Has been seen by the

Sixteenth Clinic

Class - is improving - Has two splints on, the one on the inside of the arm, has a ridge in the centre to keep the bones in their proper relation, that on the outer side has a hand piece attached - the arm bandaged and supported in a sling. The man will soon be well and the arm not in the least deformed.

7th Case, Examination of the negro boy (Jacob), with necrosis of the cervical vertebra, The Class has seen him - His condition is about the same, if any thing improving = Has an issue in the neck, and recumbent position to be maintained - bowels to be kept open by aperients.

8th Case, Examination of the boy with Coxalgia - Has been before the Class. The splint apparatus removed and the legs measured, not more than half an inch difference, and that owing to the tilting of the pelvis. The apparatus reapplied, in

Sixteenth Clinic

taking Syr. Iodid. Ferri gtt x three times a day, and keeping the recumbent position.

Seventeenth Clinic.

Dec 9th

1st Case - Examination of the Irish woman with fistula lachrymalis, has been upon the class several times - she is wearing the hair headed style to keep the passage into the nares dilated - is improving, and in a short time the lachrymal canal will remain open without the style.

2nd Case - Examination of the man whose finger was amputated at the last Clinic - is improving - the swelling entirely disappeared - the diseased portion had been entirely removed, and no further trouble anticipated.

3d Case Examination of the small yellow boy with Coxalgia - is improving - the treatment in his case is very satisfactory, consisting in keeping him in the recumbent position and

Seventeenth Clinic

the use of the starch apparatus.

4th Case – John Hogan, who was operated on for false joint; Examined – the arm has become stronger – the wire is loose, but not sufficiently so to justify its removal.

5th Case – Examination of the boy Francis, with disease of the cervical vertebra. There being a tumor on the anterior part of the vertebra, interfering with respiration, it was punctured through the pharynx, discharging several ounces of pus and greatly relieving the patient – Is on the syr Iodid ferri internally, and an issue in the neck.

6th Case – Examination of the small negro, (Sam) with necrosis of the sternal cartilages. The sinus probed to find whether any loose bone existed – Has been under treatment for some time and thought to be improving.

7th Case Syphilis in a black man. Main

Seventeenth Clinic

in the Infirmary three months ago. Has a bubo in the groin, which was ordered to be poulticed, and dressed with Turner's Cerate. To take gr v Mag. Hydrarg

8th Case Syphilis in a sailor (negro) - Washed a chancre - now has a bubo in the right groin. for which he was ordered Mag Hydrarg gr v. three times a day till the gums become sore, bubo to be poulticed.

9th Case - Examination of negro man with bubo - The bichloride wash ordered and bubo to be kept in the ulcer and to take gr v. Iodid Potassii three times a day.

10th Case - Examination of an Irish man with Psoas abscess - Has been before the Class - The abscess pointed in the right side and is likely also to point in the left. His system has begun to fail from the great drain upon it. To taking Quinine gr j three times a day as a tonic and to take Sulph. Acid. Chrom. ℥ss to urine right

Seventeenth Clinic

Sweats = Is also upon the Syr Tern Iodid -
and has an issue in the spine.
Remarks of Dr Smith.
This is a very obstinate case to treat, occurring
in a scrofulous constitution, The matter is formed
upon the spine and follows the psoas muscle
to the groin - and by pressing upon the abdomen
the matter runs out. The patient when he entered
the house was thought to have hydro, which
however turns out to be a more formidable
disease and more dangerous in its results.

Eighteenth Clinic

1st case - Examination of William Richardson,
the man whose femur was fractured by a ball -
There is still some little discharge from the
wound. This is one of the rarest cases in record -
The thigh was fractured in the lower third, and
of the compound comminuted kind in such
cases the rule is to amputate, but instead
of that the man has a good leg, somewhat
shorter than natural, and all owing to the
unimpeded efforts of nature, illustrating the

Eighteenth Clinic

rule that meddlesome surgery is bad.

2nd case - An united fracture in a sailor shewn to the class - the fracture occurred ten weeks ago - the tibia and fibula both fractured - Complete Union has taken place, with considerable deformity and shortening - the leg seems an inch and a half too short - but it is too late now to correct it.

3rd Case - Examination of a black man (Thomas) with ulceration of the umbilicus - It has been before the class. The caustic potash applied to destroy the diseased parts - this is a painful remedy, but justifiable in all such cases.

4th Case - Examination of the boy (Sam) with ulceration of the sternal cartilages. - Has been seen by the class - some sinuses were laid open - The boy is improving slowly but is still in danger owing to the situation of the disease, it being near the heart.

Eighteenth Clinic.

Disease - A white man with fracture of tibia and fibula - was before the class at the 9th Clinic. The leg has been suspended in Dr Smith's new apparatus - considerable hemorrhage has been going on for some days. The apparatus was removed and the wound probed for loose pieces of bone, but none removed, for fear of disturbing callus - The wound was dressed and apparatus re-applied.

Disease - A young white woman, with disease ankle, Has been several times before the class - the disease is very obstinate, owing partly to its situation, partly to the patient's scrofulous constitution - the disease is between the joint and tendo Achilles - an incision was made on the side opposite to the former to give still free exit to matter and kept open by lint - This patient is improving slowly and may be cured, if she is kept quiet and poultices and anodyne applications to relieve pain

Eighteenth Clinic.

1st Case - John Hearn - Examined on for false joint - Examined - Splint removed, the limb was found tolerably loose but not sufficiently to justify its removal

Nineteenth Clinic.

1st Case - Examination of the black boy with Coxalgia - Has been before the class - This patient has been under treatment some two months, and is but very little benefitted, because the joint was disorganized before the came to the Infirmary - A cauterie issue has been applied, rest maintained and the bowels regulated by aperients - He has improved as much as could have been expected and the disease arrested - Ordered to be sent home.

2nd Case - Examination of a yellow boy with Coxalgia - The class has seen him often during the session - The legs were measured and found to be nearly of same length - by

Nineteenth Clinic.

the aid of the recumbent position and starch apparatus a cure will be effected

3rd Case – Amaurosis in a gouty. The pupil is dilated – has had ocular spectra or flashes of light before the eyes – this disease depends on some change in the retina, optic nerve or brain – in this case it has resulted from close application to study, and more especially at night by a bright light – In some cases there is intolerance of light, and the eyelids move imperfectly, and less frequently than in health. The moxa was applied so as to produce slight vesication – Counterirritation to be kept up by blisters.

4th Case – Syphilis – A white man with bubo on each side – The class have seen him several times – Has been under treatment for some time – Is taking Iod. Potassii four times a day, using Bichloride wash and limit applied – is improving

Nineteenth Clinic

5th Case – Syphilis in a sailor – presenting secondary symptoms – has some superficial ulcers – ordered Iod. Potass. gtt viij three times a day – the Bichloride wash to the ulcers – This was the first time he had been seen by the class.

6th Case – Bubo – a yellow man – Has been before the class – Has taken calomel and had nitric acid applied – This has been an obstinate case – The same treatment continued is slowly improving

7th Case – Examination of the Negro man (Thomas) with disease of the umbilicus, thought to be cancerous – was cauterized with potassa fusa – is improving and will soon be well.

8th Case – Examination of the man John Hegan, on whom the operation for false joint was performed – gentle effort was made to remove the wire, but it was not sufficiently loose – The arm is improving

Ninteenth Clinic

very fast.

Gito case - Secondary syphilis in a sailor, Has ulcers on the head and a sore throat. This patient had gonorrhoea 13 years ago - Placed on gr x Iodid. Potassii three times a day - sores to be well washed and bread and milk poultice to be applied, and dressed with Turner's cerate.

Note - It is still a question, whether syphilis is ever cured - that is, so as that the patient is not liable to secondary symptoms - It breaks out in different parts of the body, - at times of a rheumatic kind, at others in various sorts of sores affecting the periosteum. Occurring also in indolent ulcers in various parts of the body - mostly in the lower extremities, but not confined to any particular part - very often affecting the mucous membrane of the throat and nose, at times of a scaly eruption - In all such cases the treatment is the same - Mercury and Iodid Potassii are the remedies which

Nineteenth Clinic

will prove most successful.

Twentieth Clinic

Dec 20th.

1st Case – Examination of the small black boy (Sam) with ulceration of sternal cartilages & sinuses appearing to be forming up into the pectoral muscle and to prevent the matter from diffusing was opened. Although the boy's disease is of a very formidable kind is thought to be improving.

2nd Case – An Irishman (Peter Kelly) whose arm Dr Berwick Smith amputated. The accident occurred in blasting rocks – is doing well.

3rd Case – Secondary syphilis in a sailor – The septum of the nose has been destroyed – and presents a very bad appearance. Ordered Jos × Iodid. Potass. three times a day & to wash. nitric acid ℥ss × aqua ℥j. twice a day. Also Turner's Cerate to be applied.

Twentieth Clinic

4th Case – Examination of a sailor with an eruption on the penis – Has been before the class – Has been under treatment – So taking Fowler's solution gtt x three times a day. and Bichloride wash, seems to be improving and same treatment continued.

5th Case – Examination of a sailor with syphilis Has been seen by the class – Has been under treatment some time – disease seems very obstinate – His general health is broken down – So using Bichloride wash to bubo and taking internally Mag Hydrarg gr v three times a day – the treatment continued – So improving slowly.

6th Case – A white man with an ulcer in the groin – the symptoms at present indicate lumbar abscess – To ascertain a probe introduced into the ulcer and the finger into the anus – but no abscess discovered – Difficult at present to decide whether or not is the situation of the disease. Ordered to

Twentieth Clinic.

have an issue over the spine, and bowels to be kept regular by aperients.

7th Case – Examination of the black man (Phobus) with ulceration of the umbilicus. The Clap had seen him before – Caustic Potash was applied at the last Clinic. – Ordered to be poulticed for the present.

8th Case – A young with Opthalmia of the right eye – Has been complaining two weeks – All the tunics are involved – and the function most likely destroyed – very much swollen and painful – Ordered to be cupped on the temple – Watery solution of Opium to relieve pain – To take Mag Hydrarg gr v. Tart. Antimon gr ¼ twice a day, and his hair to be cut, which is a great source of irritation to the eye, continually lashing the already inflamed organ.

Twenty first Clinic

Dec 23d.

Case 1st – A young man with opthalmia – Has an ulcer on the cornea – Constitution scrofulous – There is some morbid sensibility to light, which is often the case in this disease, deep ulceration is going on in the tissues of the eye – To supplant the diseased action solution of Nit Silver gr ij to ℥j to be applied with a camel's hair pencil – Water, solution of Opium – To take Mass hydrarg gr v three times a day.

2d Case – Examination of the black boy (Sam) with ulceration of the sternal cartilages – Has been before the class – The series examined – Has hernia commencing at the umbilicus – To be supported by a compress – The same treatment continued – is improving slowly and there is a probability of recovery

3d Case A youth with general opthalmia – Before the class at last clinic – Syringing wash of Nitrate silver – taking Mercury and antimony internally, is somewhat improved –

Twenty first Clinic

Same treatment continued.

6th Case Examination of the youth with amaurosis - one from the moxa was used - Counter irritation has been maintained by blisters behind the ears - is improving and will be cured.

7th Case - Sohn Hogan (operated on for false joint, wire not sufficiently large to be removed - is improving rapidly, and will be cured.

8th Case - Black man (Phalus) with disease of the umbilicus - thought to be cancerous - Caustic potash has been applied - Has taken mercury - is improving and will be cured.

9th Case - a sailor with a persistent bubo. Has had gonorrhoea - Is anemic and unable to masturbate - the prostate gland is enlarged - Tin pans have been tied along the spine to prevent him from sleeping on his back - He takes

Twenty first Clinic

Oxide silver, 4th Gentian & Hyoscyamus - Caution to be used in taking the silver, that it be not continued too long for fear of its turning the skin of a bluish color.

5th Case - Examination of the Irishman with Psoas abscess may still forming, we may continue to do so for some length of time. This disease is usually slow in progress and mostly fatal - He has had an issue over the spine and is under Constitutional treatment - His strength must be kept up by tonics, but recovery will be slow if at all.

6th Case - Secondary syphilis in a white man - Has been before the class - The nose had commenced to be destroyed - Is decidedly improved - Is taking gr x Iodid. Potass - which has produced an eruption on the skin - He is a coach box he nose is using Nitric acid gtt xx aq. ℥i - bowels regulated by aperients.

An
Inaugural Dissertation
On
Intermittent Fever.
Submitted for Examination

To the

Provost, Regents & Faculty of Medicine

Of the

University of Maryland

for the
Degree of Doctor of Medicine

By
Henry Briscoe

Maryland.

Intermittent Fever.

This is a disease peculiar to tropical climates, but prevails more or less extensively wherever the poisonous effluvia, malaria, is found. It is nervous in its character, occurring at certain and fixed periods in paroxysm, and then an intermission of a variable length. It is only known by the phenomena which it presents in its attacks, fever not yet being defined.

The most peculiar circumstance connected with this disease, is its regular periodicity, also paroxysm, and then nearly a reversion to a state of health by the patient. The paroxysm may be divided into stages corresponding to the most prominent symptoms as they present themselves; Cold, Hot, and sweating stages. In the cold stage the patient feels languid, has

no disposition for exertion, mentally or physically, has aching in the limbs and joints, pain in the head and back, Neuralgic pains and uneasy sensations about the diaphragm are often complained of. A sensation of coldness seems to follow the course of the nerves, the extremities become cold, the skin shriveled, presenting the appearance of the cutis anserina; the finger-nails have a blue ring on them, Respiration is hurried and the pulse small and frequent; the circulation is diverted internally, and the abdominal viscera become engorged, Nausea and vomiting frequently attend this stage. The patient will just rest the give in some warm place, but unless the chill is very mild, generally takes to the bed, which is often violently shaken by the shivers of the patient. These will

continue more or less violent until the hot stage begins, till the secretions are generally diminished, except the urine which is pale and passed oftener than natural, The tongue is moist but coated white, and the bowels constipated, These symptoms often vary as the patient is more or less susceptible to the influence of the poison, The cold stage is variable in duration, but the average is about one hour,

The stage may in order and not set in suddenly, but sensations cold and hot, will often be felt to run over the body alternately, to close connect one gradually; the pulse becomes fuller and stronger, the face flushed, skin dry and hot, mouth parched, with much thirst, The headache is greater than in the cold stage, and when reaction is fully established, it is of

such a degree as often to produce delirium. The secretions are also often diminished. An eruption sometimes breaks out, but soon disappears. This stage may last from two to eighteen hours.

A more comfortable sensation begins to be experienced after the second stage has lasted a variable length of time, and the third or sweating stage sets in. The patient will break out into a profuse perspiration, and feel so much relieved of his previous uneasy sensations, that he will often fall asleep and on awaking find himself comparatively well. Perhaps a slight headache, and some nervousness will be the only memento of the attack, but these soon disappear. The pulse, respiration and secretions, all, assume their normal state, and the patient during

the intermission appears as well as usual until he has had repeated paroxysms.

To distinguish the different types of this disease, pathologists have adopted certain terms, the time from the end of one paroxysm to the commencement of the next is called the intermission, and from the beginning of one to beginning of the next, is called the interval. The consecutive phenomena of the different types have not been accounted for; some pathologists say, one is the consequence of the other, but to this it may be objected, that one stage may occur and not the other, or they may not be proportionate to each other. Where the two latter stages only occur, the paroxysm is called a double ague to distinguish it from a regular shaking chill. Only one limb or one part of the body may be occasionally affected with all the

stages, The period of intermission cannot be called a state of health, but only comparatively so, Though the symptoms of the different stages may not trouble him, yet their effects are more or less felt, He will have no fever or pains but will feel weak, with no disposition to exert himself, His tongue will probably remain white, and his appetite diminished though sometimes it will be increased, According to the state of the patient's health previous to the attack, will be felt its effects, A repetition of the attack seems to give a tolerance to it; the patient may not present the aspect of health but feels well, All his organs perform their functions regularly and he will be able to attend to his studies; but if the paroxysms follow each other in quick succession for a length of time his health will vary in the intermission —

The interval marks a peculiar feature in this disease, but, besides the interval other circumstances aid to distinguish the different types, viz. duration of cold stage, and time of occurrance during year or day. The paroxysm generally lasts inversely to the duration of the cold stage, and the longer the interval the shorter the paroxysm; therefore taking that termed quartan as the type with the longest interval recognized, the cold stage will be longest and the others shortest. The quotidian, which has the shortest interval, will have the cold stage shorter, and the others longer.

There are three types generally recognized, quotidian, tertian, and quartan. The quotidian occurs every twenty four hours; the tertian every forty eight, and quartan every seventy two. Some pathologists have

recognized quintans, sextans &c but they are not generally, and probably they may be only variations of the other types.

As said before, the occurrence of a particular type at a particular time of the year or day, has led to pathologists laying down certain rules, as to their occurrence. The quotidian occurs during the morning, and the spring of the year; the tertian about noon, and any time of the year when agues prevail; the quartan about night, and in autumn. The tertians prevail most extensively, though the others are common in certain localities.

All the types are liable to variations. There may be a paroxysm every day at different periods and with different characters; those of every other day corresponding with each other. This has been called a double tertian. Two paroxysms may occur in the same day at different times, both of tertian

type; this is called the duplicated or doubled tertian, Also two may happen on one day and one on the next, and this repeated, called triple tertian,

The types may also vary as to time of occurrence, If there is much variation they may change from one type to the other, and is called, anticipating or receeding, according as they occur sooner or later than the paroxysms of the prevailing type ought,

When the disease is about to terminate favorably, it receedes and becomes milder, If left to themselves, mild cases have a tendency to terminate spontaneously, especially if the patient should only change his location for one more healthy Occasionally they run on for an indefinite time, The longer the interval, the more apt is the paroxysm to receeder, and more obstinate to cure, in its recurrence

it is safe to obey the septenary law;
The degree which the system seems to suffer from an attack of Intermittent Fever depends on the previous health and other causes acting with malaria. A person of a strong vigorous constitution can bear a larger amount of malaria than one in delicate health. Where healthy reaction in the former would take place, in the latter it would run on to fatal prostration. The character of the attack may be sthenic or asthenic. In the first, the depression in the cold stage is not so great; the reaction full, with a strong full pulse and flushed face. In the latter reaction would take place so feebly, that it would be run into fatal prostration. This has been called the malignant or congestive form. Reaction may come on slowly when the system is not much debilitated. There is also a typhoid state, when reaction is not

only slow, but the blood seems depraved, or contaminated with a poison, sordes collect about the teeth, the face looks sickly and there is much nervousness. This condition is generally met with in those who live in badly ventilated apartments, eating bad food, and much exposed to exciting causes. The congestive or malignant form is very fatal, and seems to be much influenced by the season.

The associated maladies of this disease are generally of an inflammatory character, occurring principally in the sthenic form, although it may occur in the asthenic or typhoid. The inflammation will exhibit itself by a hard pulse and the blood, when drawn is buffed. The organs which most frequently suffer are the stomach, liver, spleen, bowels, brain and lungs. The symptoms which have accompanied these complications are the same

as when they occur idiopathically; and the organs which are most liable to suffer at particular seasons, are more liable to suffer when the fever-attacks at that season.

The young are more subject to this complication, and it will happen most frequently in the quotidian type.

If it keeps up the febrile action to such an extent as to give it the character of a remittent, — but as the inflammation subsides, the intermittent will show itself. The inflammation may be coincident with the fever, depending on malaria, or it may have existed previous to the febrile attack.

The sequelae of an extensive attack of intermittent fever are not numerous or serious, but if allowed to run on unchecked it will become so. The whole appearance of the patient will change. The countenance is hagged, complexion

is sallow, The secretions become altered, tongue furred, and appetite diminished, The strength is also wasted, In children the abdomen becomes distended, The most common sequelae is enlargement of the spleen, and often of the liver, The spleen being probably intended as a diverticulum for the blood, as it recedes internally, in the cold stage, is engorged and often becomes permanently enlarged It is vulgarly called, Ague Cake, It generally decreases in the intermission but not perfectly, The liver also often becomes enlarged and hardened, disordering its functions, causing the spleen jaundice &c, In chronic cases attended with much debility, dropsy often supervenes, In more chronic cases without debility, it depends on obstruction to the abdominal circulation, caused by engorgement of the spleen and liver, or

diminution of secretion by the skin, unless the liver or spleen is organically diseased. With debility it depends on the depraved condition of the blood and consequent weakened circulation. Albumen is sometimes found in the urine without organic disease of the kidneys. The dropsy is generally easily cured, if it result simply from the intermittent; it will often disappear spontaneously, but when it is the consequence of organic disease, though it may be relieved for a while, will recur after return. There are other regularities of this disease but they are not constant or important. While it is said to produce disease, cures have also been attributed to it; but its therapeutical value is so unimportant that no one would think it prudent to bring on an attack of the fever.

In treating of the causes of intermittent fever, they may be divided into predisposing and exciting. It is generally conceded that malaria is the most constant exciting cause, and debility, the predisposing. Though debility may be the most constant predisposing cause, a previous attack is the strongest. Some contend that malaria is the only essential exciting cause in all cases, while others contend for the contrary, but when it is recollected, how long at, malaria, may lurk in the system it will be difficult to decide how much it may be associated in the attack.

How malaria produces its effects, and what its essential character is, is equally unknown, as the fever is known by its phenomena, so it is known only by its effects. Chemists have ransacked in vain to discover its constituents by

examining the air where the disease prevails most extensively. It is known to be an emanation from the earth, by the laws which it obeys, and the materials for its production; alternations of wet and dry, heat and cold, earth, and vegetable matter are the requisites for its production. It has been denied that vegetable decomposition is necessary. The disease makes its appearance most frequently in summer and autumn. It seems to obey the influence of cold weather as its attacks are not so frequent during the approach of winter. It is not often seen in the arctic regions, but increases in frequency and malignancy toward the torrid zone. Cultivation seems to exert a great influence over the poison. Plantations on which it once prevailed have become comparatively healthy by cultivation and drainage. This is especially

noticed in and around cities, which are exempt almost entirely from the disease. There are several laws which malaria has been said to obey. It can be transported by the wind, and those living to the leeward of marshes or low places where it emanates are very liable to be attacked. It cannot cross water and is arrested in its progress by trees. It collects about the feet, which makes it dangerous for persons to live under them, but they are a protection a short distance from them, as it cannot cross water. Seamen are exempt from the disease provided they do not go ashore in malarious districts, but night is more dangerous than in the day, as is seen among seamen who go ashore, and remain all night and those who do not. The creeping water is thought to be absorbed, which shows it has a

tendency to descend by its specific gravity and this idea is strengthened by its being more dangerous at night time and that persons living in the lower apartments of houses are more liable to be attacked, than those living in the upper.

The length of time malaria may remain in the system before it explodes, is variable, depending much on the previous health, it may attack in a few hours after exposure, or remain latent in the system for months or years.

Men are more liable to be attacked by this disease than women or children; not because they are more susceptible but because they are more exposed to the exciting cause.

The diagnosis of intermittent fever is not difficult, remittent and malic fevers are the only diseases with which it can be properly confounded.

from remittent, it may be diagnosed by its having no decided intermission, the febrile symptoms continuing when there should be an intermission. In hectic, the paroxysm is generally preceded by some organic lesion and its returns are not so regular. There are other symptoms peculiar to each disease, such as the complexion, which is clear in hectic; continued frequency of pulse and gastric derangement.

The prognosis of an ordinary attack of intermittent fever is generally favorable, if permitted to take its course, or if should assume a congestive form from the first, it will be more or less unfavorable. The congestive form is sometimes fatal in the first chill, especially in the old and debilitated, in whom there is not sufficient energy to bring about

healthy reaction, Should there be a tendency to cerebral congestion, and the brain had been diseased, apoplexy is likely to ensue It may happen in either the hot or cold stage, In mild attacks if the patient is removed from the equitine cause nothing more will frequently ensue, a slight nervous impression just before the chill will sometimes abort it. When allowed to run on unchecked, those sequelae mentioned under the head of sequelae will supervene, and make it more difficult to treat; not it is not quite so unpromising form as the congestive,

The treatment is generally divided into two heads, that during the paroxysm, and that during the intermission Many methods have been believed and tried in the treatment, in both periods, The first object in treatment should be

to stop the chills as soon as possible, as each successive one makes it more difficult to do so, and we cannot be sure the next one may not be fatal, by assuming a malignant form, In the cold stage nothing much can be done to relieve the patient's sufferings or cut short the paroxysm, He should go to bed and a plenty of bed clothes, Some warm application to the extremities, and warm diluent drinks may be agreeable but will not be of material service, Many attentions worry him without being of service to him; for if no danger is to be apprehended, he will feel the effects of active depletion, emetics and large doses of Quinine, all which have been recommended, more than the effects of the paroxysm, If in the previous chill the depression has been great, active means should be taken to prevent their return. Twenty five or thirty grains of Sulphate

of Quinia, with ten or fifteen drops of Tinct Opii should be given just before the expected attack, Ammonia, or alcoholic stimulants are used, but the above prescription is generally preferred, Should the cold stage become protracted, stimulants should be resorted to, to arouse the system to reaction Ammonia and brandy or some other diffusible stimulant should be given internally, while rubefacient applications should be made externally to the spine and extremities, Injections of turpentine are often serviceable, and the hot air-bath if convenient can be applied under the bed clothes, If there be much nausea, some preparation of opium will be of service, but should it be associated with an overloaded stomach, a stimulating emetic, such as mustard, followed by an anodyne will be most successful in allaying the irritability,

In the hot stage, much attention is not necessary unless reaction is excessive, and then attempts should be made to moderate it. The should be put on the refrigerant treatment, The bed clothes should be thinned ice water, barley water &c. may be given as he desires them; the body may also be sponged if agreeable to his feelings. When the reaction is in excess, with a determination to the head, bloodletting, general and local may be necessary. Pediluvia to the head and rubbers to the feet, should be avoided. In case of nausea, the effervescing draught may be found useful; it allays nausea, thirst, and diminishes fever, while it also promotes perspiration. A solution of the citrate of potassa and carbonic acid water, or acetate of ammonia is a good substitute for the effervescing draught. Opiates are objectionable in this stage as they are apt to increase the cerebral

excitement if it already exist.

The sweating stage scarcely ever requires the assistance or the attention of a physician. It should be promoted by diluent drinks, and a moderate quantity of bed clothing. Should it be excessive the clothes should be changed and the body wiped dry. To prevent a return of the paroxysm the treatment should be directed during the intermission. It has undergone much change since the effects of Quinine have been fully tested. Formerly it was thought to be necessary to prepare the patient by debilitation, purging, &c before commencing the use of Quinia. Such an idea has now in a great measure exploded. If the system has imbibed the poison many think that all the preparation necessary. The majority of practitioners still proceed more cautiously, but do not wait for a decided intermission of fever or all the inflam-

matory symptoms to subside, unless the latter be of a high grade. Having had the bowels moved if they have been confined, by calomel, or calomel and jallap, each ten grains, twenty five or thirty grains of Sulphate of Quinia should be introduced into the system in twenty four hours, any of the mild cathartics will generally answer, such as, Rhubarb, the cathartic pills &c. If there is much tenderness on pressure over the stomach, or liver and when blood should be taken locally, Should the patient be aenemic, some tonic, vegetable or mineral, in combination with the Quinia or separately, would be advisable. Large doses of Quinia, twenty five grains, have been given at once during the sweating stage, with success, the patient not having a return of the paroxysm, or having any bad results from the large dose. Still less doses have been given but it is doubtful

whether with better success, and often bad results have been attributed to it, such as insanity, deafness &c, Should the inflammation be sufficient to produce inflammatory fever, the Quinia should be preceded by depletion, There are other preparations of the Cinchona bark which have been used with nearly equal success, The Sulphate of cinchonia has been found to answer a good substitute for Quinia, but should be given in larger doses, The crude bark has occasionally been found to effect a cure, when its preparations have failed, Arsenic, in the form of Arsenite of Potassa or Fowler's solution, stand next in value to the bark preparations, It may be given to children when Quinia nauseates, On account of its poisonous properties it is not much used, Salicine, picrosine, some of the mineral Tonics, and vegetable tonics have been used successfully in intermit-

attacks, the chill is sometimes aborted by making a strong impression on the nervous system, with a large dose of opium, an emetic a blister &c. Sleep and the approach of night have been thought to prevent their return; the system being preoccupied seems to protect it from their invasion.

The diet during the attack should be mild, easily digested, and nutritious. Nothing irritating to the stomach should be taken.

To prevent an attack of this disease, persons living in malarious districts and especially boatsmen, there, should not expose themselves early in the morning or late at night. It would be prudent to take something to eat or drink before going out in the morning. They should avoid every thing is calculated to debilitate, if necessary to be exposed, but the best prophylactic will be to live constantly

under the influence of the great specific
Sulphate of Quinia,

An
Inaugural dissertation
on
Typhoid Fever.

Submitted to examination
of the

Provost, regents, and Faculty of

Physic, of the

University of Maryland:
For the degree of
Doctor of Medicine,
By
J. Emory Bull
of
Maryland.

Typhoid Fever.

This interesting form of idiopathic fever has been an object of the deepest interest to medical men of all nations, from time immemorial. Its limits are not bounded by zones or mountains, forests, rivers or oceans. Nor is the fever confined exclusively to any city or country, district, camp, coast or to a certain degree of temperature of any climate. In a word it is sporadic in a higher degree, than any of its kindred.

Though long known by a great variety of names, each of which were supposed to be significant of its nature: it has doubtless, now known, its essential characteristics. Had they been properly sought, they might have been duly detected, whether among the barbarous, civilized or enlightened. In the city or country, in the palace, hamlet or cottage. But, owing to the jealous researches of Louis, that we are chiefly indebted for its identity. That distinguished gentleman of the medical profession, was the first to examine its essential anatomical lesions, with its characteristic or automatous, rose colored eruption. Thus enabling future enquirers, to recognize its commencement

found notwithstanding, the unsettled state of its nomenclature, but with all the light that has been shed upon it by the laborious researches of different writers, collected from rays of various intensity; from its nature it remains indefinable, its vocabulary perplexing. But fortunately for us however, its phenomena and effects are less obscure, for it is these which necessarily claim our attention.

Though occasionally abrupt in its mode of aggression; it is by far more frequently, insidious in its invasion. And so gradually indeed, is the disease in some cases developed, that it is seemingly difficult to diagnose or date the period of its commencement. In others so well defined are the symptoms that they tell their own story before prompted. While others more capriciously disposed require time, seclusion and close observation to reveal their true character. And between these extremes are a great variety of phases, which are by far better respected in hospital wards, than can be delineated on paper, or set forth by

oral instruction, however erudite, eloquent, or beautiful.

It appears reserved for the bedside, to show the disease in its native garb, and to home we must resort, in order to become familiarly acquainted with the malady; and turn aside the clinical, or even the sepulchral trappings, and bending over with unremitting zeal study the disease in nature's legible characters, which rarely fail adequately and delightfully to reveal her morbid phenomena, however complex or variegated. Here we find the disease at home, in deshabille, not transferred or transformed by any medium of interpretation, however artistic, ingenious or beautiful, or handed down to us, second handedly, through any traditionary characters, however venerable, legend or hoary. By frequently viewing the disease in its native aspect — the various phenomena as they change through the different stages, they become so indelibly impressed on memory's tablets, that neither time's effacing fingers, nor the blended mass of hundred

maladies, are able to completely disguise the picture, or entirely obliterate it from our mento-cerebral camera, and here we acquire an intuitive faculty of recognition of the disease, which is worth more to the student, than ponderous tomes of graphic description. Here nearly all of the senses are employed in the exploration, and through these focal channels the mental reservoir is so stored with the varied inexpressible characteristics, that in readily recognizes the disease in any stage, however attended by incidental circumstances, or concealed in hundred complications. Just as we identify a familiar object or face, however changed by art or close the resemblance to others. There is always something characteristic when we take a direct view, and the closer the object is inspected, and in proportion to the former intelligence of, and familiarity with the senses, the more striking will the characteristics appear which, nature has there impressed. So it is with disease, which is a morbid aspect of nature in a genus homo representative. And the more

we are familiarized with its native or undisguised genera, the greater will be our facility in tracing its specific, through complicated lineage. Nor is this a mere ideal infancy fortuitous, of acquired clinical sagacity, for we sometimes meet with men who remarkably substantiate it. They appear almost at a glance to identify a disease, and by closer investigation so great is their power of penetration, that they seem to look entirely through the case, and discriminate its species, complications stage, tendency, duration and termination, with astonishing accuracy. Now what is the secret of such skill? Is it innate, or acquired from books or lectures mainly? Look into the history of such persons for a solution of the problem. We see then the necessity of studying in the sick chamber, anatomical hall, post mortem apartment, and at the operating board, as well as in the lecture room or by the midnight lamp at the centre table. These require time, patience, zeal, labour and self sacrifice et cetera. But at what shrine

can we better offer these valuable gifts of heaven? If we reject the laws of virtue and holiness, by inclination given, I know none of greater importance, than scientific truth's laws, depicted in human nature's morbid phenomena.

It was at the bedside, ~~that the writer~~, operating, and anatomical table, that the writer has gathered what he considers the most valuable portion of his medical instruction, and if the reader would at all appreciate this maiden production, it is therefore he must accompany me in his imagination. It is at the bed side then, that we duly recognize the blank apathetic or anxious countenance; the dull, metamorphosed or morbidly vigilant eye. The pale suffused or livid cheek, and sickly hue of complexion. The hot, dry, or pungent integument. It is here that we see the moist, clammy, brown, black or fiery tongue. The fuliginous mouth, with sodden teeth and gums. The corporeal prostration, spasmodic muscular contraction or subsultus tendinum, and by auscultation we recognize, when the disease is

complicated by the sonorous, sibilant, capillary or subcapillary ronchi. The bronchitic or pneumonic cough, with difficult or painful deglutition. The iliac gurgle, tympanitic or meteoric abdomen: and low muttering or wild delirium. Here we see the patient picking at the covering or grasping at indefinable or imaginary objects. And of his decubitus, the supine, inclined or low-lying posture. Here we feel the accelerated, irregular, compressible or undulating pulse. And observe the vesicular, transparent or lenticular eruption. The crimson stained pillow from epistaxis. The relaxed ani-sphincter or rectum-stillicidium. And what is far more characteristic and should have been earlier detected is the circumscribed rose-coloured eruption, in succession or crops, anything but bleom and fade. And should autopsia cadaverica be practicable and my companion not be preclude us to assist me, we may by the aid of the enterotome et cetera, gather the more substantial fruits of the fever, from the ileiptoral and mesenteric glands: in the varied kinds of indurations, varm

ulcerement, ulceration or perforation.

But perhaps you are growing weary with the hospital wards, and have been enough of the sick room phenomena, inhaled a sufficient quantity of the forementioned exhalations, duly recognized the hippocratic face and tainted mouth of the cadaverous odor, to make out or confirm the diagnosis and to satisfy yourself of the real character of the malady. And it maybe that you are by this time becoming somewhat apprehensive in regard to its mooted contagious or infectious properties, lest you should get a sui generis demonstration of its phenomena and know for yourself and not for another its happy effects, as is not unfrequently response to the jealous inquisitive student or earnest scientific truth inquirer.

If so I will not detain you longer to examine the accidental pathological lesions, to be found in the pharynx, oesophagus, stomach, liver, spleen, duodenum, & cetera, but we will return to speak our sisters of the benefit of an out door ramble, or fire preparation, as one of the best means of prophylaxis.

In the mean time if I can leave the house or lecture room long enough, I will take a more rational and detailed view the subject: which I doubt not will prove to you as well as myself sufficiently barrous and not a little frosy. But as it is an obligatory duty which a time honoured custom, has ever imposed upon medical Candidates, I will cheerfully proceed to, and endeavour to perform it to the best of my circumstantial ability. And I hope from what we have seen of the disease in our clinical visit, that my junior readers, at least, have already become sufficiently enamoured with this interesting form of fever. Its native beauty and passive loveliness, its damasked cheeks and blooming roses et cetera, to give the subject that farther attention which its prime importance merits. And that my senior readers, may not too critically scrutinize my first production, but duly consider the unfavourable circumstances under which it was written, and make all needful allowance for defects, and throw over all imperfections the broad mantle of Charity.

It often happens, for several days before the disease assumes its proper aspect and before the patient is rendered unable to pursue his ordinary occupation, he is affected with certain morbid symptoms which are usually considered precursors of the fever. These preliminary symptoms probably result from an altered condition of the nervous system. The peculiar poison on which the disease depends, being absorbed into the vascular system exerts its depressing and withering influences, over all the functions of animal life, before any well marked derangement in the mechanism of the circulation is produced. This stage of incubation, sometimes lasts for a week or longer, giving rise to numerous, and almost indescribable feelings. The patient's countenance is changed; he becomes pale and languid. Is reluctant to make exertion of mind or body. He is frequently listless, and apprehensive of some impending evil. His appetite is much impaired, or becomes capricious. His tongue becomes white and inclined to tremble. Bowels irregular. Has uneasiness or wandering pains in various parts of the body, with occasional giddiness in the head.

Drowsiness through the day, and unrefreshing slumber at night, with a general feeling of weariness or fatigue, &c

the same time, he may have experienced sensations of cold rigors, alternating with heat. This obscure and indefinite condition of ill health sometimes continues for several weeks, with but slight changes from day to day. At other times there is a slow but steady increase in the severity of these morbid sensations, with at the regular appearance of other symptoms more characteristic, coming on one after another until the phenomena of the disease is well marked. But in so gradual a manner that we can hardly fix the period of its beginning.

In other cases the period is very distinctly marked, with a chill followed by the ordinary febrile phenomena. Making its invasion suddenly in the midst of good health, without any precursory symptoms. The chills generally are not severe. In many cases only a slight rigor, but frequently a well defined chill, and perhaps this is one of the most constant attendants of the formal accession of the fever. It occurs often in the course of the day, and in many cases it recurs, more or less frequently during the early period of the disease.

Following the chill or rigor, there is almost always, increased heat of skin, which varies very much in different subjects. In some patients, it is quite moderate in degree, and uniformly diffused over the surface. In other cases, the heat is high and burning and unequally distributed. One cheek will often appear of a deeper color than the other, and sometimes the extremities may be rather cooler than natural while the trunk is excessively hot.

The state of the skin in regard to dryness and moisture also widely differ. In some cases, the skin is almost constantly dry during the whole course of disease. In others, moisture may follow the evening exacerbation for a brief period, or break out during sleep, sometimes more profuse but generally confined to certain portions of the body.

Some writers speak of a remarkably characteristic odor arising from patients affected with this disease, of a semi cadaverous and musty character; which I do not doubt, but my olfactories have become so obtuse that I have not been able satisfactorily

delirium. After recovery from a severe attack, the cuticle often peels off in large flakes, from hands and feet, and the hair gradually comes out and is succeeded by a new suit.

The pulse is nearly always preternaturally frequent, and otherwise altered in character. The most common frequency is from 110 to 120 beats in a minute, but in the whole course of the fever, may range between 70 and 160, in some cases.

In some constitutions the pulse is only moderately accelerated, but full and strong. In others especially females or young and delicate males, it is very frequent, small and compressible.

There is usually a peculiar expression of the countenance, even in cases of moderate severity, it is dull, listless and vacant. The eye is vacant and languid, the indifference and apathy of the mind is strongly painted on the face, also the pain or uneasiness which usually attend the fever. There is also a dusky or dingy hue of the complexion which is very characteristic.

Of the Thoracic Symptoms.—

The character of the respiration is seldom mentioned with the phenomena of typhoid fever. Probably the most common alteration of the breathing consists mainly in the usual acceleration which attends fever. In high grades of the disease however, and especially in the latter stages, the respiration becomes irregular, noisy and hissing. Sometimes in severe cases, a whistling nasal sound, and stridorous breathing is heard where there is coma. Dyspnoea is not commonly, only where the lungs are involved.

Cough in a majority of cases may be heard in some period of the disease. It is generally slight and scarcely attracts the attention of either physician or patient. The sputa are usually small in quantity sometimes tenacious and colorless at others rusty where pneumonia exists, and bloody from epistaxis

The most characteristic physical signs are the dry, sonorous and sibilant ronchi. In some cases they are loud and may be heard nearly all

over the chest. It appears early in the disease. Occasionally instead of these, there is humid or mucous rhonchus. And at a later period there is often in fatal cases, a circumscribed crepitant rhonchus with other physical signs of pneumonia.

Of the Cerebro-Spinal, or nervous symptoms, Headache stands most prominent. Indeed it is rarely absent, in some degree and in many cases is the first thing which arrests the patient's attention and marks the formal access of the fever. It is often the chief source of the patient's complaint. It probably occurs more frequently early in the morning, but sometimes it comes on after the third or fourth day. Its duration is various; but generally after a longer or shorter period it gradually diminishes, or is lost in delirium or unconsciousness, in about eight or ten days. Its character and degrees are various. Generally dull, heavy or throbbing; but in a few cases intense or acute, and may increase in severity during the fifth or sixth days. It is less severe in mild cases. The forehead and temples are its chief seats, but often it

-tends to other parts of the head; and sometimes soreness and stiffness of the eyeballs are felt on motion or pressure. In many cases, pain in the back and limbs attend and retire with the headache.

Of the state of the mind. I have already spoken, in describing the premonitory symptoms, and those of the early stage. The patient is sometimes irritable, but much more frequently, listless, and indifferent; he finds it difficult to fix his attention on any subject and answers incoherently, and is forgetful, and in convalescence remembers but little about his disease.

Delirium is of very frequent occurrence in this disease and its duration and degree, are generally in proportion to severity and danger of the case. It is rarely present at the commencement, or very rarely afterwards. It comes on more frequently in the course of the first or second week. Its early appearance is a bad omen. Its duration is various. In grave cases which recover, it disappears on the commencement of convalescence, and its subsidence or diminution

is one of the best signs of recovery. In mild cases it is present only during the nights, or in febrile paroxysms, or immediately after waking.
The delirium is generally of a low and muttering character, giving utterance to inarticulate words, or incoherent sentences. In many severe cases, however, it is of a wild and violent nature. The patient is in constant motion in his bed, picking at the clothes or pulling them about or drawing them lightly across him self. Sometimes he rises suddenly from the bed, if not restrained will sit up or wander about the room. In some cases the agitation is so violent that it requires constant watching and considerable force, to keep the patient in bed or from running out of the room or jumping out of the window. This state is sometimes attended with cries or screams.
The mind is generally restored on recovery gradually, but in some cases very much impaired, especially the memory, and sometimes the moral principle.
There is more or less drowsiness or stupor, as has been already noticed, preceding or alternating with the

delirium. This symptom, appears early, in proportion to the intensity and rapidity of the disease. In violent cases it usually persists and increases, unless when interrupted by violent delirium, until complete coma and death closes the drama of life.

Instead of somnolence, there is sometimes watchfulness or morbid vigilence. This is a more distressing symptom, and less favourable. It is more frequently confined to the early stage and is sometimes interrupted by a transient and unrefreshing slumber, much more frequent in grave cases and is often associated with delirium.

Amongst the most common alterations of function of the senses, the ringing in the ears, and dullness of hearing. The first of these is often present with the precursory symptoms, before the patient is confined to his bed. The tingling, which is more transient, but the ringing or buzzing sounds continue to about the middle period of the fever, more or less. The dullness is common in grave cases. It generally appears earlier than the tinnitus aurium and is not unfrequently,

precursor. Hard hearing and deafness sometimes attend or follow virulent attacks.
The functions of the eyes are occasionally variously affected. The conjunctiva may be more or less reddened or injected accompanied with a viscid secretion. Imperfect or perverted vision also may occur but not often. The sense of taste as might be expected from the state of the tongue and impaired appetite, is frequently obtuse or perverted.
The cutaneous sensibility is more or less diminished probably owing to a feeble capillary circulation. Especially in advanced stages. Hence we should guard against using rubefacients until the patient complains. For instance lining the inner side of the thigh is great tendency to ulceration from blisters of any kind or rubbing, cuts or laying long in one position.
The bladder also less sensible to the presence of its contents or stimulus and frequently or unnaturally distended therefrom.
The functions of the muscles are variously deranged by spasmodic contraction or permanent rigidity

Especially those of the fingers and wrists usually called subsultus tendinum. Sometimes the muscles of the face, and that of the diaphragm, giving rise to singultous. These are much more common in latter stages of grave cases.

Prostration of muscular power is one of the most characteristic phenomena of the disease, even in early periods, in many cases as before mentioned. And at the latter stages of grave cases we observe the patient low down towards the foot of the bed or he has that tendency.

The digestive, and abdominal symptoms.

In many cases especially in the early stages the tongue is natural or but slightly altered in appearance. Even in severe cases, for a time, it is dirty colored brown, or only with a yellowish coat, or moderately red and moist. At other times in protracted cases it becomes dark crusty surface, or black, sometimes dry and stiff, and cracked by cracks, which peel off, leaving the mucous membrane raw, red and shining. This process may be repeated in protracted cases.

There is also sordes about the teeth and gums. The patient finds it difficult to protrude the tongue. The tip and sides will stick to the lips so that it may require repeated efforts to succeed. This fuliginous appearance depends on a scanty and altered secretion of the salivary glands.

There is generally a loathing of food almost invariably and more or less thirst, and the return of appetite is one of the earliest favourable symptoms.

Nausea, vomiting and epigastric tenderness or distress are frequent attendants of this fever, sometimes the matters emitted consists of vitiated mucus or is mixed with bile of an unhealthy character.

Of the state of the bowels. Diarrhoea is one of the most characteristic symptoms. It varies very much however, in different cases and different periods or epidemics, in regard to commencement, duration and frequency. Generally it is more severe in long continued and grave cases, and vice versa. It varies from one fluid discharge to ten or twelve or more, in twenty four hours. It commences at

different periods of the fever, sometimes with it, but generally follows. And in some cases, even entirely, but the bowels are more constipated in disease than at other times.

The stools are generally liquid and more or less bilious, and of a yellowish appearance, not unlike eggs or yellow ochre. In many cases they are of a dark-brown color and of fetid and offensive odor.

Occasionally they are of an healthy appearance except in consistence, sometimes they are bloody and resembling dysentery but these cases are rare. At other times repeated hemorrhages take place from the bowels.

It probably depends on inflammation & ulceration of the intestinal mucous membrane. It does not bear any relation to the disease of the mucous follicles. It is frequently attended with a dull pain, not severe however, nor at any determinate period, the pain varies in severity from a dull feeling of lassitude to severe colicky griping. Its most common seat is in the iliac fossa, hypogastrium & umbilical region.

Tympanites, or flatulent distention of the intestinal walls is also a common and characteristic symptom. It is usually later in its appearance than the other gastro-intestinal disturbances, more common to the second and third weeks, but much earlier in many cases. There is also a gurgling sound over the region of the caecum which is very characteristic of this disease, produced by pressure, owing to the presence of air and fluid in the large intestines. Sometimes they are enormously distended so as to prevent the descent of the diaphragm.

When the bowels frequently fail to evacuate, and consequently become much distended, there may be at the same time, a constant stercoraceous vomiting which may become the most prominent, and only, symptom, unless over that region. But in passing the catheter a large quantity of water is usually escapes, which if left would have been a source of much disturbance if not danger to life. The most characteristic phenomena of this disease

Continued fever, is the rose coloured eruption. It is more uniform in its occurrence probably than any other symptom, so much so that it has been called typhoid eruption. Some writers suppose it never to be absent, at some period of the fever. And my experience, so far as it goes, corroborates the supposition. It consists of small bright red spots about the size of a small pin head, round or oval form, they disappear on pressure, or by tension of the skin, and reappear when the pressure is removed. This eruption is never seen at the commencement of the fever, but usually between the seventh and fourteenth day or later. They appear in successive crops, which last usually about three days each. They may be generally first seen on the abdomen, and afterwards extend to the chest, or intermediately both surfaces. In one case I remember to have first detected them on the shoulder and afterwards on chest and abdomen. They vary in number from one or two, to an infinite number. But usually we find from three to ten and upwards. They may be confounded with petechiae, which sometimes appear in this disease.

but is more prevalent in typhus fever, and is hardly to be considered an eruption, but rather an extravasation of blood in the skin. It differs from the true eruption in being more livid, and not disappearing on pressure, and generally far more numerous, and found on different parts of the body.

The rose eruption may also be confounded with bites of fleas or musquetoes, but the former may be known by the black spot in the centre, and from the latter we must depend on the history of the case, whether any musquetoes have been in the room, the parts been exposed or not.

Another pretty common eruption, by the use of Sudaminis, is also considered one of the signs of this fever, but of far less importance, as it is frequently found in many cases of other febrile affections. They consist of minute vesicles, of a pearl or opaline and owing to their minuteness and transparency they are better detected by an oblique view. They are also felt by the touch and occur on various parts of the body but more frequently on chest neck shoulders and axillae.

I have seen them widely diffused and very numerous. They appear later than the rose spots, rarely before the twelfth day. They seem some few days [illegible] and gradually disappear.

The most serious sequelae of this fever is supposed to be tubercular consumption, which sometimes follows very soon and runs down, speedily to a fatal termination, in patients of a strumous diathesis.

The pathological changes are exceedingly numerous and various. Scarcely any organs in the body are entirely exempt from traces of inflammations. It appears to be one of the peculiarities of this fever to develope local inflammations. But there are certain anatomical changes, which are so uniformly present, as to become especially characteristic, hence they are usually termed essential, as the alterations ~~of the alterations~~ of the glands of Peyer and of the mesentery. The changes to be found in other organs are not so uniformly present and are by some writers called accidental. The most important of which are to be found in alterations of Brunner's glands, of the spleen and

stomach. These three are more frequently found changed than any of those known as accidental, which are a numerous class. I can only pause to mention their names. As the blood, Heart and aorta, Lungs, bronchia, Epiglottis, pharynx, oesophagus, stomach, brain, liver, pancreas, salivary glands, urinary apparatus, etc.

I see from the number of pages already written that I can only pause to make a few remarks on those which are more important.

The Elliptical patches of Peyer. The changed condition of these glands had been observed by various pathologists, as Bretonneau Stark and Gittit, but Louis has the credit of fixing its precise relation to this form of fever. These plates are about thirty in number and vary somewhat in size from three quarters to an inch and a half in diameter. They increase in size as you descend to the lower portion of the ileum, as approach the ileo-caecal junction, most easily observed in a healthy state. They are not situated near the mesentery but opposite to it. These glands are always altered in fatal cases, but the alterations

exceedingly various. Sometimes only a slight degree of thickening, redening or softening is seen. At others more or less induration or ulceration, which may pass through the first second and third or serous coats of the intestine. The condition varies much with the duration and virulence of the fever, and with the distance as before said, of the plates from ileo-cecal valve and with other circumstances.

These intestinal ulcerations are generally more or less regularly rounded or oval in shape, but sometimes more irregular. (Perforations are usually small in diameter and are found near the termination of the ileum). Their color also varies from a dark, pale red to an intermediate hue. Their edges are generally well defined, smooth and regular.

The hard variety may undergo resolution or ulceration, but the soft always ulcerate. The ulcers are not necessarily fatal, for traces of cicatrization have been found.

The mesenteric glands are nearly as uniformly found altered as the mucous follicles. They are redder

enlarged, softened and sometimes exhibit traces of pus. These with those before described are the essential pathological lesions.

Of the accidental lesions the most important probably are found in the changes of Brunner's glands in the duodenum, which are much the same as those of Peyer's. These glands are smaller and not so numerous. These solitary glands are compound mucipurous follicles located between the mucous and muscular coats of the stomach and duodenum. These solitary follicles are often known to the present day as the glands of Brunner, although he restricted the latter term to the glands of the duodenum.

Other portions of the alimentary canal undergo morbid changes, but not in proportion to the gastric disturbance.

The Spleen is most always more or less enlarged, softened or changed to a darker color, and readily perforated by the finger in any direction.

The causes of the disease are very obscure, and the circumstances or conditions amidst

Which the disease most frequently occurs are very diversified — The most important are, age, recent residence, and contagion.

The influence of age in its transmission is remarkable. The disease almost always occurs between the fifteenth and thirteenth years, and the majority of cases occur between eighteen and twenty five. Young men residing in hospitals as resident students or physicians are particularly susceptible to its invasion, while older persons are exploitables. Recent residence doubtless favours its production. The researches of Louis and Chomel show conclusively that in the city of Paris, old residents were far less susceptible to its influence than those who recently moved there.

Persons changing their residence from the country where the air is pure, to large cities are very liable to it, especially when they neglect proper hygienic means or prophylactics.

Though not much influenced by seasons, it probably occurs more frequently in Autumn. Thus many

other period of the year. Though it is very uncertain and unsatisfactory in its occurrence, sometimes appears as epidemic in healthy neighbourhoods.

Some persons are doubtless more liable to it than others. There appears to be a predisposition in some, which is easily roused by various causes, as fatigue or weakness, mental disturbances, close confinement in ill ventilated rooms, etc. But in some cases we can trace no such exciting cause.

In regard to its contagion, there is a diversity of opinion. The most rational view, corroborated by observation, probably is, that the disease is infectious to a feeble degree, under certain peculiar circumstances. Such as remaining long in a close room where the disease is, and visiting such a place on an empty stomach, or when indisposed from any other circumstance. Much more might be said on this and other supposed causes, but I must pass on.

I should however have remark in regard to the essential lesions, that they are rather the effect than the cause, as they follow the beginning of the fever.

Of its essential nature then we are totally ignorant, or of what that peculiar poison is which exerts its withering influence on all the functions of animal life. Of its negative properties however, observation has taught us something by which we may approximate somewhat its character by exclusion. We know that the poison which produces the disease is not of that malarious character, or origin which produces remittent and intermittent fever. For the obvious reasons that it is not confined to those districts or regions but on the contrary, it forms there life frequently. The same may be said though probably with more reserve in regard to the cause of Typhus fever. But we must pass on to the diagnosis. The disease which bears the closest resemblance to this fever, and the one with which it is most likely to be confounded is Typhus fever. Indeed some writers of high authority think that they are only different varieties of the same species of Continued fever. But while we admit that the diseases bear a close general resemblance, we

think it equally true that there are well marked specific differences, which are sufficiently apparent when closely examined or contrasted.

In Typhus fever there is usually a darker or more livid hue of the face and more turbidness of conjunctiva. And instead of diarrhoea, or the extraordinary susceptibility to medical action which so uniformly attends Typhoid, there is usually constipation, and the fecal discharges are darker and more offensive. Hemorrhage from bowels or nose is a rare occurrence in Typhus. The eruption also is different, being less elevated, less regular in its outline, darker and of more livid hue, and does not so readily disappear on pressure as the rose spots. Does not appear in successive crops, nor is it found in the same places so uniformly. It is more widely diffused and numerous.

The Abdomen is flat instead of being distended.

The duration of disease is shorter.

The anatomical changes widely differ.

Old persons more liable to Typhus than Typhoid.

It is far more contagious, less sporadic, more endemic. Now from these and many other circumstances, and from what I have observed in the general aspect of the diseases, it is clear to my mind they are essentially different forms of continued fever, depend on a different cause, and the one can never become or produce the other. Some forms of intermittent fever bear some resemblance to typhoid in its early stage, and badly treated cases of remittent fever especially, are liable to be confounded with this form of continued fever. Our chief sources of reliance for an early diagnosis is upon the history of the case. We may require in some cases, a week or two for the characteristic symptoms to be developed, especially in malarious districts. But if we attend closely to the symptoms, we will be able to trace its lineage, or see the typhoid character standing out, notwithstanding, it, and various mask, or the occasional rego, remission or intermission of fever, that is if we have been familiar with the disease, undisguised, in those cases,

which by mal treatment, and other circumstances have run down into, or assumed a typhoid aspect. In such cases it is better not to make an early diagnosis for the treatment is not materially different, nor so much importance, both in general principles.

There are certain stages of other diseases which may be confounded with this disease which I have not time at present to describe, I will remark however if the history of the case are learned and we attend to the above rules, there will be no danger of an error in diagnosis.

Of the prognosis and mortality of typhoid fever. It is by no means certain. The mildest form often prove fatal from perforation of the intestines by ~~a portion~~ of fecal matter, having escaped in the peritoneum through the perforated ulcers in the ileum at a time when least expected. On the other hand the most resolute cases recover, so that while we should not be in despair with the most desperate, we should be cautious in our prognosis of the mildest.

The mortality varies much in different seasons

and places, and I depends so much on the character of the disease in any particular locality, and during any particular period, that it would be a difficult matter to give an average result. It would be rather a complex problem, the solution of which I will defer at present. There are a great many elements which enter into the composition of the prognosis of a case, some of which I may not be able or at least not presumptuous in me, to briefly notice.

The mode of invasion appears to have no small degree of influence upon the subsequent character of the disease. Some of the most unfavorable symptoms are the following - a pulse over 120 in a minute. Early, complete and steady delirium with great prostration. Coma, stertorous respiration. Recent subsultus, and epileptiform spasms. Much diarrhoea, hemorrhage from bowels, and involuntary discharges from bowels. Lying low in the bed etc.

Above the symptoms, reverse in character, to those

and if the constitution of the patient or his previous health have been good, we would very naturally think without the accident of perforation that his chances would be favourable, especially if it be a young patient.

As to the theory of this fever, its typhoid element and how it produces those numerous well known extralogical lesions etc. I prefer to pass over the numerous speculations on the subject in silence, on this occasion and pass on to that which is more important — the treatment.

Various indeed are the modes of management of this important malady, adopted by different practitioners. There is no other disease perhaps, of so frequent occurrence, and of equal importance, the treatment of which is so unsettled, and the modes of management so opposing. There is but little unanimity either in opinion or of conduct of different practitioners.

Under such circumstances, there is probably no disease, the treatment of which requires a closer

observance of the first law of therapeutics, than this, or requires more skill and judgment on the part of the practitioner. Here we probably see the powers of nature better tested in the mighty struggle with the depressing and withering influence of her subtle enemy. And the best the Artist can do, however skilful, or great his anxiety, is to become a faithful handmaid to nature, watch dilligently all her indications, and at the same time keeping an equally vigilant eye to the tendencies of her enemy's insidious ways. And to afford just such assistance to the former, as her flagging powers dictates, and to use the best remedies contained in the pharmacopoea for supplanting the decreased action of the latter, or whose, they will be less likely to impede or embarrass nature's efforts, in extricating herself from her insidious antagonists. These indications should be conducted on the best known, general and well tried principles, modified by common sense, and sound judgment, well disciplined in the best school of medical science.

Under such a plan of treatment, I doubt not, that

the vis medicatrix naturae, in a large majority of cases, would prove itself quite adequate to the contest between nature and her aggressor, by meeting all emergencies which might arise, and repelling whatever obstacles her artful foe might superinduce, and acquit itself with due credit to Nature's powers, and to the faithfulness of hand maid or the skill and judgement of her medical attendant. With these general remarks we might close the treatment of this most interesting disease in three words

Bra Re Nata

Much has been said in regard to the use of quinine in the treatment of this disease. Some high authorities think it a valuable agent in very many cases, where there are no particular complications, contraindicating its use. That quinine given in doses of gr. X every hour or two so as to procure its sedative effect on the nervous system &c. will frequently abort or greatly shorten the course of the fever, and bring it to a more speedy, and desirable termination. While others equally eminent, think that we have no power of arresting the disease, and that it would be dangerous to attempt anything more than to mitigate the symptoms, or palliate the course, and appear rather reserved, in granting, that agents even a harmless position in the treatment, except in tonic doses when such are indicated.

The probability is that the most judicious course here, as in many other cases, lies, between the extremes, I believe there in many cases of

pure typhoid fever, that quinine in free and repeated doses would prove here as in other fevers a valuable febrifuge, and more especially when the fever is in any way blended with malaria, or assumes an intermittent or remittent form. But until it has been better tested it should be used with caution. I doubt much whether it will ever prove to be a specific in this fever, or even occupy a hopeful position in a majority of cases. But from what I have seen of its use I have been favourably impressed with its salutary effects in some cases, and think it deserves, and am disposed to allow it, a fair trial before it is proscribed.

From what I have seen and learned of the disease I am inclined to believe that a majority of cases, without serious complications, require but little more than proper or simple or hygienic measures, as rest, compressed, well ventilated apartment of [illegible]

No superfluous furniture or clothing, a bland and nutricious diet. In complicated cases are to be met on general principles, but with due regard to the well known tendency of the disease to run a certain course and the usual irritable condition of the alimentary canal. Hence the mildest agents should be employed and the expectant plan followed. The most usual indications are to remove sources of irritation — moderate undue excitement — employ stimulants and tonics in depression — and combat local inflammation as it arises —

To fulfil the first indication — the removal of sources of intestinal irritation, we should resort to the internal use of aperients, of the mildest character, and in moderate doses. For this purpose, small doses, of Calcined magnesia or Olean Ricini are appropriate, the former is preferable where there is acidity, in the primary stage, and the

Laudanum with tinct Opii where there is pain or hiccough. Pulv Opii, which are protochloride in small doses in some cases may be preferable.
The bowels should be attended to throughout the complaint, or as to secure one free evacuation daily. They are generally too loose but sometimes the secretions are deficient then the above remedies or a saline powder will generally answer the purpose.
Sometimes it may be necessary to give a mild emetic to remove irritation from the stomach, and produce diaphoresis, in the early stage, but this plan is rarely needed.
The second indication is to moderate undue excitement. In young, vigorous and strong constitutions, even early, full and strong, with sanguine determination to the brain or other vital organs, the venesection is strongly indicated until it must be regarded to neglect it. But these cases are very rare, and in taking blood

we should bear in mind the tendency of the disease to run a certain course, which is often very protracted; hence we should act moderately in a sitting or standing posture, taking as small a quantity as will answer the purpose of reducing pulse, and allaying the cerebral derangements — and husband the patient's strength as much as possible.

Local depletion, maybe employed with more freedom, but tonics and stimulants at the same time are not to be neglected.

Cold applications maybe employed internally and externally as long as agreeable to the patient's feelings, unless there be serious thoracic diseases, also,

Refrigerating diaphoretics, should be employed from the commencement, as, e.g. Cit. Potassae 3j to a pint of liquid, 3ss per. Effervescing draught when the skin is dry and hot and pulse not very feeble. If the bowels are quiet in

the stomach not irritable & pulse not very feeble but firm. Tart emet & potassae, etc may be added to each dose of the neutral mixture, should it produce much nausea of stomach or bowels, small doses of Tinct Opii or Sulphas morphiae may be given. At a later period opt. with dulc, mineral waters, lemonade, acidulated barley water etc, when there is no diarrhoea

When there is local inflammation, with derangement of secretions, small doses of mercury may be employed even to slight Ptyalism, the clamour against it notwithstanding, if map Hydrarg gr iij or protochloride gr iss or any fever lasts

Thirdly the employment of stimulants and tonics. Whether to employ or withhold these agents, frequently constitutes the most important part of the treatment of this or

in other adynamic forms of fever. No doubt that they are often withheld on account of their supposed entire incompatibility with fever, until the powers of life are so exhausted that they cannot be rallied, and the patient frequently slips through the fingers of the physician, while he is attentively engaged in fulfilling other indications. Hence the proper administration of these agents, requires the exercise of the physician's best skill and judgement. I have noticed in other diseases their salutary effects. When the patient had been on low diet for sometime the patient's strength much reduced, pulse feeble and rapid. And on a more generous diet and a little tonic medicine the pulse soon fell to its normal frequency and the patient rapidly improved with no other treatment.

The following are some of the inde-

cations for their employment. The state of the skin, pulse and the general condition of the patient are to be regarded.

Where the pulse is very slow, or very frequent and feeble, skin partially hot or unusually cool, tongue and teeth incrusted with dark sordes, here there can be but little doubt about the propriety of tonics and stimulants. But we should begin cautiously with a more generous diet and afterward medical tonics or stimulants as wine whey or wine and water, brandy and water, carbonate of ammonia etc. Observing carefully their effects and regulating their use accordingly. Sulphate of quinine in tonic doses, has long been known as a valuable remedy. Chloride barbitharic is indicated, when the tongue parts with its dry crust leaving the surface smooth red & shining, known by the name of the glazed tongue. Dose from gtt v to xxx in mucilage or syr tolu etc. If it irritates the bowels tinct opii may be added.

In contracted local inflammation cupping leeches or blisters employed and at a later period some

fisms and vesicating plasters, remembering the tendency to sloughing in the latter stage of this fever. When epistaxis is excessive the posterior nares are to be stopped. Hemorrhage from the bowels and diarrhoea etc are to be treated on general principles.

To relieve nervous distress aqua camphora, Hoffman's anodyne and inhalations of chloroform are useful. Opium is contraindicated in very slow or quick pulse. But in many cases it is of great value as when there is much diarrhoea, sleeplessness and want of perspiration, and more especially when perforation is thought to have taken place for the purpose of quieting the nervous system and alimentary canal. The recumbent posture also should be insisted on and the utmost composure secured to prevent as much as possible the escape of fecal matter in peritoneal sac. Here large doses of opium should be given to secure sedation, and counteract spasmodic contraction of diaphragm. Creasote and

Soot may be used as disinfectants. Strict attention should be paid to the surface of patient. When cool additional cover, warm applications, and vice versa. bearing in mind the frequent insensibility of the patient, and avoid burning or otherwise abrading the surface.
The patient should not be allowed to lay long in any one posture, doubled mattrasses, or should be employed and frequent examinations of the surface to prevent that dreadful calamity sloughing.
The hypogastric region should be frequently examined to ascertain the condition of the bladder. Patients have perished from vesical ulceration, caused by long and over distention of that organ. Strict attention to diet should be had throughout the fever and great caution in convalescence.

N.B. The author owes an apology for not revising his thesis. He feels deeply conscious of its imperfections, and its need of a revision, but his time engaged by impaired health forbid the undertaking

An
Inaugural Dissertation
on
Vertigo
submitted to the examination
of the
Board of Regents and Faculty
of Physic
of the
University of Maryland
for the
Degree of Doctor of Medicine

By
John A. Thompson
of
Ohio

This is the term applied to a peculiar deformity of the foot, of which there are several varieties, but may be divided into, Varipes Æquinus, Varipes Varus, Varipes Valgus, and Varipes Calcaneus; making in all four varieties of the deformity. Varipes Æquinus, which this variety is the most simple, it is not the most common; this variety of talipes may vary from a slight elevation of the heel, to that degree of deformity, in which the foot is drawn up so high, that the weight of the body is borne on the anterior part of the foot. and in a true case, the patient stands square on all of the metatarsal bones; but in some cases, where the toes incline a little inwards, or outwards, approaching somewhat to other varieties of talipes, the anterior part of the sole of the foot, cannot be applied

over to the ground, and the weight is received on the metatarsal bones, of the great or small toe, according as the tendency to lateral displacement is inwards, or outwards; the inward tendency is more common, and it has been assigned to the reason, that foot has a more extensive adduction, than it has abduction. In many cases where the patient is requested to stand erect, and place the foot flat on the ground, it will appear the bear equally on all parts, of the anterior sole of the foot; but as soon as you cause the patient to walk, as soon as the foot is in an extended position, it will incline inwards: it is supposed to be owing to the arm of the astragalus, which is moved from side, to side, is received between the two malleoli, the foot turning

inwards, and the portion of the sole of the foot, in relation with the small toe, supports the weight. In a general time the foot is convex above, and concave below, and in cases that have existed for a sometime, the foot and leg, on the affected side, are somewhat shorter, and smaller showing that the parts are less developed in every way; the gait of the patient is peculiar, and impeding, pain, and a feeling of weakness is often experienced at the instep, owing to the constant strain on the part, the patient is sometimes troubled with corns which form on the part of the foot, which comes in contact with the ground; in some cases, the patient of a mountain foot can scarcely diminish the deformity; but when the distortion is caused by paralysis of the peron

muscles, no motion can be produced, the motion is not powered by any change in the muscles; it is very important to institute this mode of examination, as it regards the prognosis, as those deformities which are caused in paralysis, are not apt to do as well, and be followed by such a satisfactory result, as if they were dependent on some other cause. Talipes Varus: This variety of deformity, or talipes, is the most common of all; the heel is drawn upwards which constitutes extension, the toes are turned inwards which is adduction, and the patient treads on the outer edge of the foot, the inner edge being raised from the ground, which is rotation; and instead of the sole being horizontal, it is vertical; this three old alterations from the natural position of the foot, occasions

the most serious impediment to steady, or comfortable, walking. The foot is preternaturally small as well as the limb; and it deviates from the natural condition, not only in relation to the limb, but in its shape also; its dorsum presents an unusual convexity, and there is a corresponding concavity, its inner edge is short, and unusually concave, its outer edge is convex; and in many cases has a semicircular outline, on the middle part of which the patient is unable to bend, the patient has no power to bend the foot, by voluntary effort, and attempts to move it increase the adduction; when the deformity is slight, the foot can be straight in a natural position, but as soon as the force is removed it returns to its former shape, when the deform-

ity is more extensive, it cannot be restored to a proper position; and in the worst cases it could be moved but very little, in this form of hernia, the sacs, coverings, and inner division of the prostate gland, and often the bladder of the urinary orifices, are very close under the integument; these symptoms may exist at birth, or arise afterwards.

Perineal hernias, this is much more common than either of the two former varieties of this description, there is a tumefaction in the middle line, as it rounds the protuberance of the anus to the left; but they are the rarest of hernia in bigger dogs, the foot is fixed, adducted, and rotated outwards; walking is very difficult and painful, in the worst cases, the patient cannot place any portion of the sole of the foot, to the ground and the inner side supports the weight of the whole side,

the toes incline inwards, and the foot presents the same appearance of atrophy, already described in the other varieties of this deformity. This variety may either be congenital or acquired.

Talipes Calcaneus: This is the term which has been applied to that variety of talipes, where the fore part of the foot is raised, and the heel is depressed, when the deformity is very great, the os calcis is brought in a line with the leg, and the patient supports his weight on the posterior part of the os calcis. Anomalous conditions of Talipes Equinus. The bones which present the greatest deviation from their normal relations, are the astragalus, os scaphoides, and os cuboides, and os calcis, of the tarsus; the metatarsus diminished in size, but more particularly the astragalus, and its natural articular facets for the tibia, and fibula, are obliterated and almost denuded of cartilage, which

new ones are formed at a greater or less distance backwards; where the deformity is to any considerable extent, these surfaces are partly formed by the astragalus, and so that by the Os calcis, the head of the astragalus is prominent on the dorsum of the foot, and diminished in size, and the articulating surface for the scaphoides, which is also diminished in size, is not in form, and is always drawn downwards; the os calcis is very seldom quite deformed, in the higher grades of talipes, it forms the articulating facets for the bones of the leg, the surface of this bone which articulates with the os calcis, is contracted, in extent, and the upper and anterior part of the bone is felt very prominent on the dorsum of the foot, in consequence of the os calcis being drawn downwards. all the rest of the bones present their natural appearances, with the exception

of their not being fully developed, all of the bones, and metatarsal bones, are so arranged as to give the foot an unnatural concavity above, and a corresponding convexity below; the bones of the articulating feet of the Tibia, and Fibia, are rounded, and lengthened by cartilage, which appears to be in consequence of their not coming in contact with the Astragalus, at this period. the muscles in this form, as well as the other varieties of talipes, are changed; being either shortened, or lengthened as it may be, to correspond with the situation of the bones; these alterations are now considered as a consequence and not a cause of the deformity; the muscles in all varieties of talipes are invariably affected with abnormal changes which are ascribed as the causes of the distortion, the distinguishing characteristic

is that the equilibrium of the antagonistic muscles is lost, the disturbance of the muscles may take place, either from paralysis of the tibialis anticus, or of it and some of the other extensors of the foot; and it is thus that we have the consequent shortening of the muscles of the posterior part of the leg, or it may have been caused by a spasmodic contraction of those muscles last mentioned; the gastrocnemii or the muscles only concerned in the production, and maintenance of this deformity, although some of the other extensor muscles may be affected, it is comparatively rare that the division of any of the tendons, except that of the Gastrocnemii is necessary; these are the principle conditions of the muscles in this variety of the deformity; but there are changes in the bone

place, which to all external appearances, resemble talipes varus, this deformity has been known to arise from contraction of the ischiomuscle, excited by an abscess of the leg; varicose or psoriasis of either of the coverings of the leg, cicatrization of extensive ulceration, or from the maintenance of the foot in a particular position, assumed in consequence of inflammation, or other painful affections of the joints;

An improved knowledge of the exciting cause of talipes, and of the abnormal condition of the parts, has led to the adoption of simpler and more rational principles of treatment, than formerly prevailed. In all cases of talipes varus, whether congenital or acquired, or if it be induced by a spasmodic contraction of the muscles of the back part of the leg, or of parts of the

in front, or if structural shortening has occurred to any considerable extent, the treatment consists in the division of the tendons of the shortened muscles; and the relocation of the foot to its proper position, by mechanical appliances. When the structural shortening is to a slight extent, the mechanical treatment may of the prove sufficient, without the division of the tendons; in some of the two classes, both in that which requires division of some of the tendons, and that which yield to mechanical treatment alone, the origin of the disease should be minutely inquired into. In some cases where there is no structural shortening, medical treatment should be directed to the origin of the disturbance, whether in the nervous system, the digestive apparatus or in some other organs. With a view of removing the disturbance, can

the deformity, in such cases an operation is not advisable, but if patient with indicated bladder, to use friction, manipulation, and such mechanical contrivances, as will be most useful to prevent the urine, while the spasmodic contractions remain, to pass by bladder to the [illegible] through simply. It may be performed with an Franks pointed instrument, a small straight sharp pointed Bistoury, or with an ordinary knife in the shape of a Scalpel, or with a narrow bladed instrument, not more than an eighth of an inch in breadth, the cutting edge of which does not extend more than one or two eighths of an inch from the point towards the remaining part of the instrument, so as it can be turned in the wound, and thus the operation be effected without an extensive division of the integument.

as it is very important that the wound in the integument should be as small as possible, i.e. in Equinus, the heel tendon, is usually the only tendon which requires division, but in some instances the fascia of the plantar region, and the plantar fascia; the division of the tendon is accomplished, thus: a point the knife between the tendon which is to be divided, and the integument, and in dividing the tendon, cut towards the inner part of the foot or a point the knife between the inner part of the foot, and the tendon which is to be divided, and cutting outwards, and divide the tendon in the act withdrawing the knife, after which the position can be performed in few seconds, but the latter operation is most advisable. After

the tendon must be divided, the wound is to be closed, and the foot allowed to remain in its deformed condition, until the wound is perfectly healed, which is usually not more than two or three days, as the wounded tendon is not exposed, the danger of inflammation is greatly diminished, and as it may not be entirely divided, and the risk of suppuration avoided, no pains should be taken to restore the foot to its proper position, until the wound is perfectly cicatrized, when extension is commenced it should be very gradual and increased daily with great caution not to cause any irritation which might retard the continuance of the extension, when tenotomy is necessary for straightening the foot, for retaining the cords to their-

proper position, for example the muscles on the posterior part of the leg; and by raising up the heel, promote the contraction of the muscles on the anterior part of the leg, by which the foot is retained in its proper position, both with relaxation, friction, and percussion should be daily employed, and will be found beneficial; the morbid condition of joints than is the same abnormal condition of the bones; in the varieties of the clubfoot as in talipes equinus, there is also changes produced by adduction, and rotation; it is supposed that the astragalus undergoes less changes in its position, than either of the other tarsal bones; the posterior part of the calcaneum is drawn upwards, and a little outwards, and its anterior extremity a little inwards, and the scaphoid bone comes

and varied forms, not only present the same peculiarity as in talipes equinus, but by the adduction, and rotation, of the foot they are twisted inwards, and rotated on their axis, so that their inner edges are in a measure directed upwards, and their outer edges downwards; where the deformity is but slight, it is often caused by the tendo achillis, but where it is more extensive, the tibialis anticus, tibialis posticus, and flexor longus pollicis are involved. In determining the most prudent method of restoring the foot to its natural position, we are to be guided by the same consideration as in a case of talipes equinus and as there was mentioned under that head it is unnecessary to repeat it again, the abnormal conditions of talipes varus, are, that the anterior

is twisted against the inside of the internal malleolus, and does not enter into the composition of the ankle joint, but is turned downwards, and if the patient endeavours to walk, the scaphoid, and calcaneum, pass on the astragalus, and these bones together with the internal malleolus, would have to support the weight of the affected side. The treatment of talipes planus is conducted on the same principle as the two former varieties of this deformity in some cases the division of the tendo-achillis is sufficient, and in others the tendons of the peroneei muscles are requisite. Abnormal conditions of Talipes Calcaneus, there is not much change in the tarsal bones, in this variety of the deformity in question, there does not be a considerable sensual mass at the posterior part of the astragalus, and

interior part of os calcis. In treating this variety of the deformity, we are guided as before stated, always using mechanical means, and avoid an operation if possible; but it is proper to divide such tendons, as seem to retard our design.

The effect of all mechanical apparatus, is to lengthen all those muscles which are unnaturally shortened, and produce the contraction of those which are unnaturally elongated; and the apparatuses to produce these effects, are so numerous, I will not endeavour to describe them.

Submitted for

the Faculty of Medicine

of the

University of Edinburgh

for the

Degree of Doctor of Medicine

by

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] good [illegible] by a [illegible]
[illegible] by a [illegible] [illegible]
[illegible] allowed by a [illegible] [illegible]
[illegible] by no [illegible] [illegible]

[illegible]

[illegible] and on third day [illegible]
[illegible] the [illegible] would be [illegible]
[illegible]

[illegible]

[illegible] without [illegible] [illegible]
[illegible] the [illegible] [illegible]
[illegible] by [illegible] [illegible]

[illegible] the [illegible] [illegible]
[illegible] about the [illegible]
[illegible] in the [illegible] [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] pulse is sometimes [illegible]
[illegible] at others it beats [illegible]
[illegible] while at another [illegible]
[illegible] peculiar nature [illegible]
[illegible] circulation is carried on [illegible]
[illegible] the blood [illegible]
[illegible] becomes pale and [illegible]
[illegible] the appearance [illegible]
[illegible]

[illegible] sometimes coated with a [illegible]
[illegible] at others [illegible]
[illegible] there is generally [illegible]
[illegible]

[illegible]

[illegible]

[illegible] for [illegible] the [illegible]

[illegible] the [illegible]

[illegible] these [illegible]

characteristic of the wild [illegible]

[illegible] called the [illegible]

[illegible]

[illegible] over the [illegible]

[illegible] sometimes the [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] malignant or [illegible]

[illegible] ited. It [illegible]

[illegible] obstruction. [illegible]

[illegible] preceded by [illegible]

[illegible] flammatory [illegible]

[illegible] tendency of its [illegible]

[illegible] its first onset, or it may [illegible]

[illegible] character, [illegible]

[illegible] several [illegible]

[illegible]

[illegible] cold [illegible]

and [illegible]

[illegible]

[illegible] pulse is generally small [illegible]

[illegible] irregular, often [illegible]

[illegible]

[illegible] 160 [illegible]

[illegible]

[illegible] the patient [illegible]

[illegible] degree of internal heat [illegible]

[illegible] the patient [illegible]

[illegible] This condition is [illegible]

[illegible] of internal heat

[illegible] cold as ice.

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] cold [illegible]

[illegible] more [illegible]

[illegible] become pale and [illegible]

[illegible] a struggle of [illegible]

[illegible]

with alarming [illegible]

[illegible]

[illegible] but most commonly after three

[illegible]

[illegible]

[illegible]

[illegible] begins to beat with more

[illegible] these symptoms again [illegible]

[illegible]

[illegible]

the previous relation. The [illegible]
[illegible] this in the great [illegible]
[illegible], but most generally [illegible]
[illegible] the horse, [illegible] again to [illegible]
elbows. The cold stage is the most
[illegible] of the three in this [illegible]
[illegible] consultation the prevention
[illegible] is but slightly [illegible].
[illegible] through the [illegible]
[illegible] the left the [illegible]
[illegible] pernicious [illegible]
[illegible] [illegible]

[illegible] that it is not [illegible] [illegible]
[illegible] but for the [illegible] [illegible]
[illegible] in other diseases [illegible]
[illegible] such [illegible] [illegible]
[illegible]

[illegible] led to believe from its [illegible]
[illegible] for it [illegible]
[illegible] that inflammation could be [illegible]
[illegible] extinguished [illegible]
[illegible] [illegible]
[illegible] inflammation attending the [illegible]
[illegible]
[illegible] in nothing peculiar in the
[illegible]
[illegible]
[illegible]
[illegible]
[illegible] other conditions [illegible]
[illegible]
[illegible]
[illegible]
[illegible]

[illegible]

[illegible] the intensive symptoms, [illegible]

[illegible]

[illegible] no matter [illegible]

[illegible]

the disease which most [illegible]

[illegible] this character [illegible]

[illegible]

[illegible] in the [illegible]

[illegible] tooth-[illegible]

[illegible] who lives in [illegible]

[illegible] district.

[illegible] sickly [illegible] while the [illegible]

the family suffer from [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] intermittent,

[illegible] diseases [illegible]

[illegible] notefies other diseases recurring

[illegible] to its [illegible]. It

that miasmata may give rise to

various intermittent affections, out

[illegible]

[illegible] causes, and that the miasmata

[illegible] influences them as long as

[illegible] its presence [illegible]

[illegible]

[illegible]

due to inflammation of some part of the alimentary canal, or to inflammation of the liver and that they do not depend upon the [illegible] communications, which [illegible]

[illegible]

[illegible] effect rather than the cause of the fever. I believe the most [illegible]

[illegible]

intestinal is that the nervous system is the part principally involved [illegible]

[illegible]

only secondary. The condition is [illegible] of the [illegible]

[illegible]

[illegible] of [illegible]

[illegible] periodically, but now [illegible]

[illegible] to the same general law. [illegible]

[illegible] the periodicity of day and night

[illegible] of [illegible] seasons go. [illegible]

[illegible] the influence of the moon [illegible]

[illegible] is the most [illegible]

[illegible] because this [illegible] is

[illegible] revolution. Now [illegible]

[illegible] the day the moon [illegible]

[illegible] it is [illegible]

[illegible]

[illegible]

[illegible] effects, for the [illegible]
[illegible] in an recent [illegible]
a storm in night is produced [illegible]
[illegible]
[illegible] may remain in a degree [illegible]
[illegible]
[illegible]
account for the [illegible] of the [illegible]
[illegible] with the [illegible] of the [illegible]
[illegible] letter the letter &c. [illegible]
[illegible]
[illegible] but the [illegible] [illegible]
[illegible] from the highlands [illegible]
[illegible]
but it may [illegible] the
[illegible] to produce a [illegible]

[illegible]

[illegible]

Cause.

The cause of intermittent fever seems to depend on atmospheric principle which has obtained the names of Malaria. [illegible] circumstances of its being identified most intimately by marshy districts. It is not confined to marshy districts only for when the circumstances which are supposed to produce it exist [illegible] several of the four elements are [illegible] [illegible] are also [illegible] [illegible] [illegible] positive.

[illegible]

[illegible] the [illegible] the [illegible]

[illegible] the [illegible] the [illegible]

[illegible]

had continued for a long [illegible]

[illegible] out [illegible]

[illegible]

[illegible] of the [illegible].

Hence we have intermittent [illegible]

[illegible] abundantly in summer [illegible]

[illegible]

[illegible] of [illegible]

[illegible]

[illegible] instance also [illegible]

[illegible] power of the poison [illegible]
[illegible] vegetable decomposition
[illegible] connection with the [illegible]
[illegible]
for the violence of the poison [illegible]
[illegible] death where not a trace [illegible]
[illegible] be found, here they were [illegible]
to protection by the action [illegible]
[illegible] moist soil. [illegible]
[illegible] that a large [illegible]
[illegible]
[illegible] the poison, but therefore [illegible]
[illegible]
[illegible] the [illegible]
[illegible]
[illegible]
[illegible] poison [illegible] exposed to the [illegible]
[illegible]

boundary line

thus be co.

aining District

to all its effects

Accounts to be also

[illegible] the [illegible] malarious [illegible]
and [illegible] the [illegible] also [illegible]
of [illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] that the [illegible]
[illegible] [illegible] be [illegible]
perfect safety during the [illegible]
[illegible] [illegible] would not [illegible]
unacclimatized traveller [illegible]
[illegible] [illegible] [illegible]
the poison and it has been [illegible]
that it is owing to the [illegible]
combustion which is going on [illegible]
this that protects their inhabit[illegible]
from malarious fever. It has [illegible]
been ascertained that the gas [illegible]
lies all the time on [illegible]
most malarious [illegible]
[illegible]
the circumstance of their death
as gas arises around [illegible] they are
protected from the poison [illegible]
surrounds them. [illegible]

[illegible] be taken by the ele[illegible]
[illegible]

[illegible] with the [illegible]
proportion [illegible]
which [illegible]

[illegible]
ing to [illegible]. It is [illegible]
& the con [illegible]
[illegible]
[illegible] chief science.
this communication [illegible]

[illegible] principle is so [illegible]
alter the delicate taste of the [illegible]
nor the most minute [illegible]
the [illegible] has [illegible]
[illegible]
[illegible] could [illegible]

[illegible] in favour of the germinal and [illegible]
theories [illegible]
[illegible]
[illegible] be [illegible] one [illegible]
is how does it get into the [illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]

Gout

[illegible]
[illegible] are often followed [illegible]
[illegible] some of which are more [illegible]
[illegible]
[illegible] the liver and [illegible]
and when we look at the [illegible]
[illegible]
[illegible]
[illegible]
[illegible]

[illegible]

[illegible] the [illegible] to

[illegible]

[illegible] without the [illegible]

[illegible] or [illegible],

frequently [illegible] and by

chronic [illegible]

[illegible] most [illegible]

[illegible] is the dropsical [illegible]

[illegible]

blood. [illegible] also [illegible]

[illegible]

[illegible] often been observed [illegible]

distinct, the [illegible]

other diseases and [illegible]

[illegible] intermittent [illegible]

[illegible]

[illegible]

[illegible]

many [illegible]

[illegible]

[illegible] complications. [illegible]

[illegible]

formidable these are called [illegible]

[illegible]

are accompanied by [illegible]

to cerebral affections. [illegible]

complicate [illegible]

are called gastric [illegible]

[illegible] attention [illegible]

of the stomach [illegible]

[illegible]

gastritis. [illegible]

[illegible] inflammation [illegible]

[illegible]

[illegible]

[illegible] of the bladder [illegible]
[illegible] most [illegible]
[illegible]

[illegible]

[illegible] called [illegible]
a pulpy mass. The bladder [illegible]
and its membranes [illegible]
appearances, false membranes [illegible]
[illegible]
tubercular and so called "Dry" [illegible]
and intestines [illegible]
[illegible] vomiting, diarrhœa and [illegible]
[illegible]

[illegible]

[illegible] analogy

[illegible]

[illegible]

[illegible]

[illegible]

always just as the [illegible]

[illegible]

[illegible]

[illegible]

intermittent [illegible]

[illegible]

of occurring at the same [illegible]

their [illegible] [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

to bring about a change in the mind of
the [illegible] [illegible] [illegible]
[illegible]

[illegible]

[illegible] [illegible]
[illegible] [illegible] [illegible]
[illegible] under the influence [illegible]
[illegible] [illegible].

[illegible]

are rarely so [illegible] [illegible]

[illegible]

and [illegible] [illegible]
[illegible] [illegible] [illegible] when the mind
is much [illegible] to [illegible]

[illegible]

[illegible] externally also [illegible]
extreme cold [illegible] [illegible] [illegible]
[illegible] by [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]

[illegible]

[illegible]

...es of irritant substances [illegible]
...rium has often been used in the [illegible]
stage with the view of [illegible]

[illegible]

...ave to lessen the [illegible]
bring on reaction. It has also [illegible]

[illegible]

...ryspm with the use of [illegible]
it and sometimes with [illegible]

[illegible]

and greatly benefited by [illegible]
...duloats its first indicate [illegible]

[illegible]

having proved so successful [illegible]
hands of his followers. [illegible]

[illegible]

and blood while [illegible]
[illegible] he [illegible] the most
obstinate [illegible]
[illegible] the [illegible]
bloodletting with the [illegible] that is
[illegible]
phenomena and he [illegible]
soon as the convulsion was [illegible]
and equilibrium restored to the [illegible]
some physiologists thought [illegible]
reflex on the mind by telling [illegible]
that any thing which [illegible]
impression would [illegible]
the possession thus [illegible]
[illegible] the patient under [illegible]
instead the possession [illegible]
developed has sometimes [illegible]
to suspend it. Bloodletting [illegible]

to the bad effects which have
followed its employment.

[illegible] a powerful diaphoretic, [illegible]
and if the blood has [illegible] it [illegible]

Bloodletting has been recommended as
a more applicable to the hot stage
position signs of congestion or [illegible]
[illegible]

to moderate excessive febrile [illegible]
bloodletting when necessary [illegible]
cold diaphoretic drinks the effervescing
[illegible] given [illegible]
[illegible]

the antimonial tartar [illegible]
commendable by [illegible]
[illegible] plunging the [illegible]
[illegible]

[illegible] to be considerable [illegible]

upon the mere direct injection
to most more obvious
[illegible]
[illegible] more complete [illegible] it
[illegible] [illegible] [illegible]

One minim would be [illegible]
[illegible]
Solutions or precipitates [illegible]
necessary irritability [illegible]
[illegible] by the mouth. If [illegible]
[illegible]
in the discussion [illegible]
Do we consider the [illegible]
under a specific poison
Minim should act
[illegible] such poisons [illegible]
[illegible]
Do to the [illegible] of [illegible]
[illegible]

in small doses [illegible]

[illegible]

[illegible]

scales claim for it a great [illegible]

those advocating the large doses [illegible]

that it is much more [illegible]

and unattended by the [illegible]

[illegible]

follow from the same [illegible]

[illegible]

intervals. As to the time,

during it the intermission [illegible]

have before said is the best [illegible]

[illegible]

increases the fever if given [illegible]

[illegible]

[illegible]

with other [illegible]ties. [illegible]

[illegible]

[illegible]

[illegible]

especially in chronic cases, [illegible]

[illegible] with the crude [illegible]

Sometimes preceded [illegible]

[illegible] has [illegible]

Cinchona has been [illegible]

[illegible] has been found to act [illegible]

the same effect as Quinine [illegible]

cheaper and as the [illegible]

[illegible]

[illegible]

injection [illegible] It is given in

doses of grain and in [illegible]

equivalent to one grain [illegible]

Next to the [illegible]

[illegible] arsenic [illegible]

[illegible] in the [illegible]

[illegible] given in [illegible]

[illegible]

of arsenic and bigi

have been

and

It is astringent tonic.
had a fair trial. The
pepper,
have

[illegible]

[illegible]

[illegible]

has become intermittent [illegible]

[illegible]

one important circumstance [illegible]

overlooked is to be observed that [illegible]

to continue the antiperiodic [illegible]

several days after the paroxysm [illegible]

[illegible]

will prevent relapses.

The treatment of the [illegible]

[illegible] fever differs from the [illegible]

ple only in getting the system

more rapidly under the influence

of Quinine and giving support

when the vital powers fail.

[illegible]

needed in this form [illegible]

and it should not be [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

fully under the influence
just before the expected fit.
In the treatment of this
there are other indications
[illegible] of the paralysis [illegible]
[illegible] also to be alle
[illegible]
It is well enough to [illegible]
[illegible]
[illegible] exposure [illegible]
[illegible]
[illegible] if [illegible] is likely to
prevent the [illegible]

the beginning of a fine [illegible] the

[illegible] has been accomplished by a [illegible]

and has not been thought [illegible] of

[illegible] delivery [illegible] provided

the passage of the minor stages

into the lungs [illegible]

into the system.

An
Inaugural Dissertation
On
Bilious Remittent Fever
Submitted to the
Consideration
of the
Provost Regents,
and
Faculty of Physic
of the
University of Md.
for the degree
of
Doctor of Medicine

William [illegible]

10524.5

Bilious Intermittent fever.

In this Treatise, we shall first speak of the cause of periodical fevers in general, how it is propagated, and shall attempt to disprove the prevailing fallacies (the denial of the existence of the causes that generate Malaria): It is an established, and indisputable fact, that there are exhalations escaping from the earth, and that these are known to propagate disease; indeed Nature though seemily prolific of so many, and divers blessings, and ever with open lap to replenish wants of her children, still there are lurking, ills, or I might more properly say perversions, which each and all are wont to sap the strength, and grievously impair the health of the body — which indeed we almost commence with our infancy; for the air into which we are immersed is full of danger, both the is point

and inorganic world around us, is pregnant with the most direful poisons: and it may truly be said of the child, that as soon as it received its

"Breath,

It sucks the lurking principle of death."

Now we maintain that these exhalations, which have received the name, and we shall use hereafter, (Malaria) escaping from the earth, are dependent upon the concurrence of heat, ~~and~~ moisture, and vegetable decomposition for its production, and also for its further propagation; the temperature must be above a certain degree — and must be continuous for a definite duration. Thus in St Petersburg, although the heat of summer and other seasons is often excessive, yet it is of too short a duration to cause the existence of these fevers: again we see their intensity increase, as we approach the equator — where they assume the character of a continuous, then [illegible]

Thus these periodical fevers most are at, and it is probable, that the severity of the case, and the intensity of its symptoms are commensurate with its cause: or dissimilar in some of its phases, that they might seem to belong to another, and possibly different malady. In some situations, the congested type predominates — marked by a high degree of excitement of the sanguiferous system: in others a depression of the nervous system, characteristic of the typhoid type — the prominent feature. Cases of these only cease their development after a decided frost — proving their dependence upon vegetable decomposition. Again we meet it originating in the midst of the Ocean — although frequently along the coast. Cities are [illegible] and it is a painful spot. [illegible] generally [illegible] in some [illegible] most where this miasma arises — and are wafted by the winds to places adjacent; corroborative

tion of this, I will cite an example given by Rep. Wise to his class, as said to be the periodical fever, which is prevalent in Portsmouth — especially about that part known as Marsh — Market — which formerly was a close rubbish — surface covered by constant pools of stagnant green appearance. During the continuance of this — fevers were a constant plague to all those who lived about it — But now since it has been cleared of this rubbish — the whole place is now rendered habitable — and as healthy and exempt from these fevers as any part of the city. The season may also have an influence, no doubt — owing to the neutralization of the gases or in some other way rendered innocuous — perhaps from the constant fires, which produce carbon and sulphureted hydrogen — which must decompose the impregnated air. Another reason may be exempt from malaria, [illegible] decomposition

Of the precise nature of miasmata, nothing certain is yet known; even their existence has been denied by some; and in support of this theory, it is alleged that the diseases, usually considered as miasmatic, have often occurred, where there was no evidence whatever of vegetable decomposition, as for example in dry sandy soils, & on oceans. In corroboration of this, Mr. Fergusson cites innumerable cases, but we know from evidence incontestible, that the places, referred to by this Gentleman, are actually surrounded by stagnant pools of water; besides chemical observation has shown that there are many and millions of microscopic objects floating in the atmosphere which are invisible to the naked eye — and which are capable of producing these effluvia again in other places. This proposition, we will prove the necessary to quote matter in the soils; and then the fact that these effluvia are not arrested by the finest sieve

Pasteur regards as the bulwark of our defence and, as yet, untouched by the enemy, and so long as it remain so, so long will the most con-
tinue to ascribe miasmata's influence whatever be its nature to organic & vegetable de-
composition — with the concurrence of heat and moisture. The manner in which miasmata operate in producing disease, we are still ignorant — all that we are acquainted with is, is drawn from the effects which it produces, which may be accomplished by absorption — both by means of the lungs — we inhale surrounding air — they then enter the circulation, by which it is engrafted upon the system — also it may be absorbed by the skin — it may enter by means of saliva — from whence transferred to mucous coat of stomach. The time in which the disease may attack — after exposure to cause is indefinite — left it seems dormant for a considerable length of time — until some ex-
citing cause rouses it to action, the most-

characteristic morbid effects of miasmata are exhibited in the Intermittent & Remittent Bilious fevers — these bring in others as Gastric and Septic derangement —, We have now sufficient in establishing our points — first that there are such poisons known as miasmata — and secondly these are known to be causes of diseases, known as Periodical fevers. Now we shall speak of Remittent fever —; We shall first divide this fever into three distinct grades viz. the Simple, Inflammatory & Congestive: symptoms of each varying — in proportion as energies of system may be different — so may it give rise to varieties and grades of this fever — as the poison in united the first seeming determining the decision of the Physician: the Febrile opening in its nature. The Febrile powers materially present: the skin with distinct and indicative [illegible] a perpetual [illegible], [illegible] the [illegible] of the Physician [illegible] the [illegible] of [illegible] [illegible] presence [illegible].

Several days to the attack – Patient is generally languid – complains of an indescribable feeling; fullness, and tenderness on pressure over the epigastrium, impaired appetite, tongue slightly furred; bitter taste in mouth; fugitive pains in neck – generally over the brow, which are ordinarily preceded by slight chilliness, quick pulse – Pulse small and irregular. The duration of this chilliness varies, extending from that of a few minutes, to an hour – rarely however for a longer interval has it been extended. For some months after vaccination Patient is liable to this sensation of chilliness upon any change of position he assumes, in consequence of his body coming in contact with a colder surface. When that sensation is fully established, Pulse feeble incompressible, irregular, tongue furred and moist, mouth clammy and dry generally at first for cold drinks, tongue white and loaded, pulse soon increased in rapidity and force – varying from that of 80 – to 130 in a minute –

Pains of head, and limbs now become aggravated, great throbbing in the temples; there is seldom delirium, yet there is always restlessness. There is a loss of appetite - amounting even to a loathing of food - accompanied with nausea and vomiting - this last is the most characteristic of the disease; these symptoms continue about 15-18 hours usually, without abatement, after which, perspiration breaks out; the pulse falls in frequency, and force - subsidence of the nausea and vomiting - there is usually a remission, and no real intermission of febrile symptoms, which is the broad characteristic mark and distinction from that of the intermittent; this remission or abatement is exceeding variable - in some instances not lasting more than 2, to 3 hours - in others continuing a day, being shorter or longer depending as the type may be quotidian - or tertian - The first remission is most marked; then the symptoms of fever recur - sometimes like the first - commencing

with a chill, and subsiding with perspiration — but frequently without either the one or the other. This goes on for a time in another way, but the alteration continues, each successive eruption [illegible] more and more [illegible] and each remission less decided and shorter, until the disease attains its maximum of severity. However in many cases the remissions are still distinct, yet it often happens that they are quite other wise, and the eruption [illegible] the pain, [illegible] skin somewhat cooler, and the suppressing of the pain [illegible]. The [illegible] [illegible] [illegible] The remissions, [illegible] [illegible] [illegible] tension and strength by the development of the [illegible] [illegible] [illegible] becomes mottled or dotted, which the disease increases, it assumes a brown or black appearance. If the disease is a mild one, which [illegible] it most frequently [illegible] this and assumes an appearance of inflam-

and typhus and generally taken as a good prog-
nosis. Patients often are troubled, indeed tormen-
ted by a constant sensation, with the tendency to a
[illegible]; the Stomach [illegible]
irritable – insomuch so at times that it causes
instant nausea – and very often immediately
rejected – Spontaneous vomiting very frequent.
The bowels are usually constipated especially in
early stages – the Stools [illegible]
dark, sometimes exhibiting a redundancy – and
again a deficiency of Bile, at an advanced stage
[illegible] and
often dysenteric symptoms appear; tormina, tenes-
mus [illegible]
istics of the disease – and which is nearly always
present, is a yellowish tinge of the skin, extending
even to the adnata of the eye – this condition of the skin
makes its appearance about the 4th 5th day of the dis-
ease, and generally extending over whole surface,
with the capillary vessels seem to be engorged with
the [illegible]

[illegible] in this disease, is strikingly
ed by the constant headache. This is a general sole
ldes in with the [illegible], and it does not leave the
patient until the disease has run its course;
together with this, there is sometimes delirium
[illegible] and face flushed — also indica-
ting a [illegible] condition of the brain. Now
[illegible] the fact that
[illegible] of the disease,
we do not pretend to say, by this, that this inflam-
matory debility of the [illegible] is a necessary
complications — [illegible] for any effect is not
and therefore it is regarded only as an accidental
complication, and not essential to the disease.
[illegible]
The first grade of this fever is simple inflam-
matory, [illegible]
[illegible]
Together with the preceding symptoms — which are more immediate
[illegible] there is a long continued [illegible]
[illegible] distinct remissions, [illegible]
[illegible]
[illegible] inflammatory fever.

together with an inordinate appetite of the mucous surfaces; the succeeding exacerbations are marked by an increased violence of all the predominant symptoms of the disease; and when the disease is arrested by appropriate treatment, the pain of life must inevitably sink; the pulse becomes small and weak, the tongue dark coated with a dark, thick coating; the respiration hurried, and difficult; the stomach often swollen and by paralytic atonia comes on; and not unfrequently, involuntary discharges of an offensive dark discolored character, and finally death ensues; but if the case terminates favorably — instead of an increase violence of each paroxysm — there is a general diminution; the skin becomes moist; the pulse less frequent, less irritability of stomach — and tenderness over Epigastrium — pain in the head now disappearing, and the exacerbation is of a shorter duration — and as it declines, the skin becomes soft and moist; the countenance

becomes natural and therefore, the patient may be indifferently stupified with the signs of amendment, and the other phenomena of the disease gradually subside. The symptoms in this stage are termed pernicious, on account of its being the most virulent, and [illegible] as it name implies it is a disease of a most malignant type from its commencement.

This form is characterised by a great and sudden prostration, marked by a diminished temperature, and decreased sensibility of the whole surface, "rapidly as Mr Watson remarks, the result of defective innervation and an impeded action of the heart and lungs; the blood imperfectly decarbonized, accumulates in the interior organs, & thus prevents [illegible] of this functions. The impression of the malefic cause by which the disease is produced, is in all probability, made primarily upon the nervous centre, and by depressing the vigor of its action, gives

rise to all the other phenomena which characterize this form of fever. It exhibits different phenomena, depending upon the functions affected, since it disturbs both the organic and animal functions. As our limits here, will not allow us to take up and trace the disease attaching each of these functions separately, we shall confine ourselves in giving a cursory view only. The whole physiography of the patient is singularly expressive of a wild unconscious delirium; Eyes semi-open; flesh resembles that of a washerwoman's, tongue dark brown or black. Patient complains of great internal heat, while extremities if examined by a third person are cold. Stomach excessively irritable, incessant vomiting, respiration laborious. Pulse feeble and fluttering, unconscious, [illegible] and right hypocondriac region; the mind becomes affected, indifferent and dull. Patient utters sentences, and finally falls into a comatose state;

The remissions in this fever, are scarcely discernable – or rather there is an entire absence of the febrile exacerbation – presenting but one rapid augmentation in intensity – assuming that of a Typhoid type & of fatal ends generally from 5th to 15th day. The principle Anatomical lesions in this disease, are found to be In the Liver, Spleen, and Stomach; during life there are symptoms indicating the existence of seemingly lesions, as that of the Meninges of the Brain, and ~~oft~~ even congestion of that organ has been detected after death, but still this is not always present, and hence are such lesions have been termed accidental complications. The Liver is generally more or less softened; its colour instead of a reddish brown – assumes that of a Bronze [illegible], [illegible] membrane of Stomach [illegible] is often inflamed – The spleen is always enlarged often 3. to 4 times the bulk to that of [illegible] natural dimensions its substance resembles that of

clotted blood. The convalescence in all the
forms of Bilious fever is always protracted,
and the disease is ever ready to unmask
itself and assume its most hideous form
from the least exposure. The prognosis in the
[illegible] and inflammatory form, generally
favourable — but the last, exceedingly unfa-
vourable — If the remissions be distinct and
remedies be actively employed — the case will
be a mild one — As a general rule [illegible] the
first and second [illegible] The danger may
be warded off. If however this becomes
and severe — Patient generally sinks under
it. [illegible]
general rule applying to general remedies, is
applicable [illegible] a previous
dose of arsenic be taken — there generally fol-
lows pain and [illegible]
[illegible]
thirst and irritation [illegible]
now in treating this disease [illegible]

there appears in a manner and in only should of combatting the cause — which must be accomplished either by neutralizing or decomposing the poison, we therefore administer the iodide — the hydrated peroxide Ferri, which is a chemical antidote, for the insoluble arsenite — Ferri — which is harmless; how in Medicine transcendent power — but the primary [illegible] is not [illegible] only but [illegible] [illegible] the action of this, the antidote is unquestionable demanded, in order to neutralize the poison — mostly which, morbid appetite, set up in [illegible] and fretting too, since — "non potest esse effectum sine causa, et si tolle causam cessat effectus". Therefore by neutralizing [illegible] poison [illegible] that [illegible] counteract these disastrous appetite — and consequently [illegible]

pretend to deny that morbid processes are set up, and which if allowed to proceed unchecked, would not inflict irreparable injury upon important organs; for example if poison be in the blood, irritation will exist, so long as this remains; and if it be removed, the reparative powers of the part may not be able to repair the injury, that has been inflicted, and it is here we should assist nature to overcome these effects, if inflammation be set up we must treat it as such.

In the treatment of the simple form, we can often cut it short by an Anti periodic, for generally in this, there are no complications, since the disease has made no inroads on the constitution as there is not sufficient poison in the system; By a small dose of Quinia this fever, the disease is checked.

In the Inflammatory form we should at once examine the Stomach, Liver, and Spleen, and if by pressure there be pain

and tenderness, or where pain is unaccompanied by tenderness, our ~~attention~~ separately, or all of these organs, we are confident that local congestion is present — our first endeavour therefore should be to remove this, for so long as there be congestion of these organs, and not removed, so long will the disease remain, and occur in all its vigor. We should never examine well the pulse and especially if the case be an obstinate one, in which condition we will invariably find that its obstinacy in yielding to remedial agents is dependent solely upon the abnormal state of these organs. To accomplish the removal of this congestion, if we find there be pain together with tenderness — we should resort to leeches or cupping the latter generally preferable. If there should be merely pain — we should ~~[illegible]~~ this is best. Poultices made of powder which he assails seems to act best.

Venesection is almost always contraindicated; since the powers of life are feeble — and with the evaporation of a several depletory — it may even prostrate beyond point of reaction. Again when the patient is previously debilitated, and especially in whom a Syphilitic influence is operating, conjointly with the miasmata: Blood should not be taken. (Says Woodville & Arthur) except in patients previously healthy, and of a vigorous constitution, when the pulse is strong, full and tense — the face flushed, and the pain of the head considerable, and especially when these symptoms persist after free operation upon purgative — together with intolerance of light and sound, with delirium, and when hemiplegia is accompanied with the above symptoms, the indication is still stronger than if such sudden bleeding is required, and in great danger of proceeding, without beyond reaction, by the necessary to Bleeding treatment

Is it not better, to substitute, for that treatment, another, which can not only accomplish the same, but can be applied at any time, and consequently instituted, as if there be signs of inflammation of the stomach, liver, and spleen — we must apply our leeches, cupping or blisters, as the case demands, and without waiting such a decided impression on the system — as is produced by general depletion?

As a general rule, strict attention should be directed to the alimentary canal; at one time it was strongly recommended to begin with an emetic — but this is not required, except there be indications of crude ingesta or an accumulation of bile in the stomach, as is shown by a bitter taste in the mouth, and frequent, but ineffectual efforts to vomit. In this case an emetic is indicated — and for this purpose Ipecacuanha is generally preferable, as it produces less irritation.

But when the partial circulation, including that

of the liver, or the bowels be loaded with bilious accumulation — so long as these remain, so long will there be a constant source of irritation, and disorder — so simple a cathartic has been considered by many, beyond all comparison best adapted to accomplish our object; since it remains better on stomach than any other drugs, and has a special tendency to act upon the liver — promote the secretory function, and consequently free the blood from all the biliary matter, which may have become redundant in it: the dose should be from 10. to 20 grs and repeated in 6. or 8 hours by castor oil — if patient be previously constipated — if patient be weak and delicate — a saline purgative Sulphate of Magnesia may be substituted or else combined with Rhubarb and Jalap: If the bowels be very obstinate — an enema should be used: after bowels have been thoroughly evacuated, it will be sufficient to repeat the pill once or twice daily to accomplish this a saline draught is sufficient

This is the principle of purging, or [illegible] antagonism, since it drains and weakens the patient. If purgatives are indicated, as they are generally, especially in Repertorial arrangement, and also that the time be cleared for its proper incumbent medicine, in order that our Antiperiodic may act more vigorously, just as a man, who is preparing to fight in order that there be no antagonistic agents, he throws off his garments, and by this means, the whole power of his muscles can exercise their strength. So with regard to our Antiperiodic – that it may exert its full force – it must come in contact with the surfaces where it is to expend its virtues, free to be unimpeded in its course. We often hear men boasting of their strong stomachs and they want something to get it off! This is thus, there can be no [illegible] in digestion, [illegible] through nervous [illegible] in the stomach – which in turn causes a [illegible] motion of the intestinal tract, and this is transmitted to the stomach; so overcome this [illegible] and it is difficult to impregnate combined

with the extract of Colocynth. In the later stages of the disease, when Mercury has been used, especially when there has been inflammation, or extreme congestion, which not unfrequently is not improved by direct depletion, and again in the low typhoid forms of this disease, where the tongue is incrustated and where Mercury has been used, most strenuously, although this be one of the greatest indications of its use, still not unfrequently, we find the patient sinking, pulse small, feeble and fluttering, the discharges of a black tenacious character, skin dry and parched, tongue cracked. In this stage of the disease, we can readily remove the symptoms by the use of Carbonate of Ammonia, which acts not only as a alterative, but also as a tonic and stimulant. Together with these most urgent symptoms, Quinine is indicated, which of the [illegible] is now [illegible] in this disease. Therefore no matter what stage our patient is in this disease, whether he be mild and delirious with opposite tongue and stupor, administer it freely, pro re nata. Never strike our sheet anchor in this disease, and if our patient is restless, have another paroxysm in which he rises since, yet stand up & if thought necessary administer it.

These large doses have been objected to, in consequence

of its operating most powerfully on the brain.

In small doses it is a stimulant but in large doses it is a direct sedative for in every case administered, it decreases heart's action, and diminishes the pulse. Myself I am convinced of the above fact. During attack of typhoid fever this fall, my pulse when I entered the Infirmary was 100 & was put up in very 4 hours — my pulse during the first 24 hours fell to 86 — was continued daily after that to decrease gradually 84 — 82 — 80 — until a healthy pulse was established — I suffered no uneasiness in my head except a slight similar sensation. As a general rule minute powders of quinine are recommended and there is very reason to believe a similar one will prove patent — whether there be inflammation or not, he should give Quinine — disregarding the symptoms — He effects are shown by the buzzing in the ears. After these agents, Alcoholics come in with great advantage — during the secretion stage. As the patient comes to convalescence, it is plain stimulating externally and internally, so I recommend this — medicine is very palatable in the appearance draught. ℞ Bicarb Soda ʒ ij — Aqua pon ℥ iv — in one bottle — and Sulphate Mag ʒ ij — Aqua pon ℥ iv — in another — Tablespoonfull of each — [illegible] continued as long as it agrees with the patient.

In the last form of congestion fever, the principle indication of cure, are to rouse the nervous energies to action — to relieve as quickly as possible the central organs from their overwhelmed state of congestion — in order to bring about a reaction as speedily as possible. One of the most obvious remedies is artificial heat; the most prominent form, is the warm bath, followed by a pail-dose of Hoffman's drops. Patient should be rubbed dry, and friction applied to hands and feet — flannels applied epigastric and abdominal region, heat in epigastric region — blisters applied to the spine. Along with this, at same time some strong liniment applied in, along the spine — also Linseed oil applied by means of friction's good; the means of bringing the central organs from their state of torpor and bringing on a general reaction, internal remedies are among the most efficient — big-bellied bottle Ammonia Carb. or Linseed oil may prove highly advantageous. In this stage Calomel in combination with Senna or infusion of Colocynth — pill formed in a few hours by the bowels a injection of Senna will generally produce a copious dark coloured discharge from the bowels, thereby unloading portal circulation will often produce signal benefit — Calomel if given may be continued

with Quinia — and as the last constitutes our main reliance it should be commenced with immediately in large doses repeated at short intervals — disregarding the remission in suspected reaction; of the curative properties of this most things it stands pre-eminent as the specific against all Malarious poison; for the other concomitant symptoms — as hyperæmia of the Brain, Lungs Liver and Spleen — they are to be treated — as those of the Inflammatory form, of which I have already spoken. Fevers often continue for days, generally become Chronic — which generally depends upon impoverishment of the Blood, to relieve it, or enrich it, we place patient on the shortened Line Tari. When there is epistaxis [illegible] The best treatment in this case is to administer Quinia, in combination with Brandy — Tari — and it [illegible] the [illegible] in the Blood — and neutralizing the poison in the system. As to the [illegible] and [illegible] I must refer to the [illegible] the [illegible] combined with Quinia & Tari, they enriching the Blood — which is called for, as patients suffering as I have before remarked from chronic

The alkalies should not be used in these cases of acidity, particularly in malarious fevers — as they tend to especially to impoverish the blood — —

Wm. J. Bowman

An

Inaugural Dissertation

on

Acute Bronchitis

Submitted to the Examiners of the

Medical Department Faculty of Medicine

of the

University of Pennsylvania

for the Degree

of

Doctor of Medicine

By

Richard Mansfield

of Maryland

Philadelphia May 1895

To the Faculty of Physic.

Gentlemen

In accordance with the requirements of this Institution I have prepared for your inspection the following essay on Acute Bronchitis, which though undoubtedly imperfect I hope will meet with your acceptance.

Throughout the whole range of Nosology there are but few diseases which ought to be more carefully studied and more thoroughly comprehended and which demand more prompt and energetic treatment than the one now under consideration.

This disease consists essentially of inflammation of the mucous membrane of the air tubes which supply the lungs and as these are the organs through which the blood, after its vitality has been lost in supplying the various parts of the Body, circulates in order to

receive as it were a new life by coming in contact with atmospheric air. Now it seems quite intelligible, that if from any cause a sufficient quantity of air is prevented from reaching this carbonized blood, to purify it that the whole system must suffer in consequence of venous instead of arterial blood being transmitted through it. In the cause of this disease we may have precisely these effects produced. The inflamed tubes pouring out such copious secretions as to bandage some portions of the passages and thus prevent enough air gaining access to restore to the blood the vitality which it lost while circulating through the system. By proper management how are these changes may in a great majority of instances be prevented.

An attack of Acute Bronchitis is generally preceded by a few days of indisposition. There is a feeling

of languor and mental depression, a slight headache and wandering pains in the back and extremities. After the elapse of two or three days and occasionally even a longer period the patient experiences a sense of chillness alternating with flushes of heat and complaints of pain in some portion of the chest. These symptoms may continue from a few hours to a day or two sooner or later however the disease becomes fully developed. The cold sensations are now completely replaced by the febrile excitement. There is excessive heat of surface with a frequent and firm pulse, the pains in the head and loins now become more severe, the urine scanty, and high colored and mucusings throughout the regions of the chest. The cough which at the onset of the disease was slight now becomes more exceedingly distressing

and annoying to the patient. The expectoration is scanty and consists of a thin glairy fluid which is very irritating to the mouth and fauces occasionally there is nausea and burning. Sometimes the disease assumes this highly inflammatory stage almost from the commencement there being scarcely any appreciable preliminary symptoms. There may occur a rigor which lasts from two to six hours after which violent reaction comes on and we have evidences of acute Bronchial inflammation being established.

The expectoration which in the first instance was thin and scanty becomes more copious and less transparent. When the inflammatory symptoms begin to subside, the pulse becomes slower and more regular the skin cooler and moister the secretion of urine more abundant and the tongue,

which during the stage of high excitement, was very distressing, now becomes less troublesome and the expectoration more tinged and tenacious. If hemorrhage or the expectoration comes on the cough again becomes very annoying and the sputa assumes its former thickness and transparency. Sometimes there is an abatement of fever in the morning with an exacerbation in the afternoon. The cough which in the beginning was continuous becomes during the progress of the case much lessened. The patient resting tolerably well during the night but on rising in the morning is attacked with a violent paroxysm of cough and expectorates a great quantity of tinged and tenacious mucus which affords him considerable relief.

The duration of this disease is from ten days. Sometimes however when the attack is slight it may terminate sub-

but if it be of a severe grade and remain neglected it may continue a much longer time. The patient sometimes recovers from the disease without complete relief of the cough. When this happens he should be exceedingly careful to avoid exposure for he will be very liable to a relapse from the slightest cause.

The above is the form the disease when it is situated in the large Bronchi but often we meet with inflammation extending to the minute ramifications of the Bronchial tubes, causing great prostration and excessive dyspnoea. The copious secretion poured out by these minute branches sometimes completely prevent the entrance of air into that portion of the lungs supplied by them. Occasionally the same effect is produced by a clog of mucus blocking up one or more of the Bronchiae. When this happens

we find, on the patient's coughing and expectorating the offending matter that atmospheric air again rushes into that portion from which it had been expelled. The attacks of dyspnoea that sometimes occur in this form of the disease are very distressing and occasionally carry off the patient during the paroxysm. The expectoration in this form of the disease becomes very viscid and tenacious resembling somewhat the sputa in Pneumonia.

The occasional form of the disease is that in which it becomes complicated with spasm of the fibrous portion of the Bronchial tubes the patient suffering paroxysms like those of spasmodic Asthma. There is also another variety which is said to chiefly affect infants It is that in which fibrinous exudations take place within the Bronchial forming tubes of false membrane. Sometimes small portions of these sta

tubes are ejected during the act of coughing and expectorated presenting the same size and shape as the tubes from which they have been expelled. This complication sometimes occurs in the milder forms of the disease. In other cases the patient is troubled with constant cough and often spits up blood in consequence of the separation of the false membrane and finally expectorates these separations with complete relief to all the symptoms.

In many instances it would be very difficult to diagnose this, from other diseases of the respiratory apparatus or when existing in complication with other grave maladies, if we did not call to our assistance the invaluable aid of percussion and auscultation. On percussing on the chest of a person laboring under Bronchitis a clear sound is elicited. But on applying

the ear, various morbid sounds, characteristic of the disease are heard. The first effect of inflammation of the bronchial tubes is to diminish their calibre from the congestion which takes place and the air rushing through the contracted passages gives rise to sonorous and sibilant rhonchi, the former is heard over the larger tubes it is a deep or grave note and has been compared to the snoring of a man, the humming of a gnat and the bass notes of a violin. It may be heard either during inspiration or expiration sometimes during both these movements but more commonly in expiration. The sibilant rhonchus is a sort of whistling or whistling sound, heard both in inspiration and expiration it may however be heard during either of these actions exclusively and is usually produced in the smaller bronchi rarely, they take place in the large tubes

These sounds continue for awhile and then are superseded by other abnormal ones owing to secretion taking place from the inflamed tubes. These are denominated moist rales and of which but two varieties occur in this disease the mucous and subcrepitant. The mucous rales is heard over tubes about the size of a crow quill and is formed by the bursting of bubbles of liquid contained in the tubes. The subcrepitant rales is produced by the same cause but as it occurs in the minute ramifications it must necessarily be much finer. It indicates a high degree of inflammation of the minute bronchiae a variety of the disease called from its situation capillary bronchitis and may be heard at the base of both lungs posteriorly. This form of the disease is usually very violent and speedily dangerous and often terminates in death.

In some instances it is said that the secretion takes place so soon after the inflammation has commenced that the dry sounds are not heard at all. There can be no doubt that they exist for a short period but as they are very transitory had ceased before the attention of medical men was called to them. Cases occurring in old and debilitated subjects or in those of broken down constitutions are generally of the asthenic variety and have been described by many authors as pleuropneumonia mortis. This form of the malady is very dangerous, and often proves fatal, as the patients from their previous habits or state of the body are not able to bear active treatment.

Formerly it was not easy in all cases to distinguish this form of the disease of the respiratory organs. But since the introduction of auscultation it is easily recognized by keeping in mind the sounds produced in

Each of these affections a correct diagnosis may be very readily made.

One of the most common causes of Bronchitis is cold and damp air acting on a constitution predisposed to inflammation of the mucus membranes. It may also be produced by partial exposure of the body to a current of cold air more especially when it comes in contact with the posterior surface of the chest. It occasionally arises from slight catarrh, the inflammation extending down the larynx and trachea into the Bronchial tubes. Inhalation of irritating vapors is a common cause of the disease.

The pathological lesions detected after a fatal termination of this disease are redness of the mucus membrane of the Bronchial tubes which is sometimes diffused at others in points or patches. The tubes may either be softened or thickened and indurated. The sometimes observe blood mixed with mucus and pus has also been found.

In the treatment of acute Bronchitis

it is well to bear in mind that four indications present themselves, and these are to combat the inflammation, to allay cough, promote expectoration and finally support the failing powers of life. For the accomplishment of the first indication the lancet is the most potent remedy. From a person of a vigorous constitution blood should be taken from the arm until a decided impression is made upon the system. It may be repeated if necessary. In connection with general depletion by venal bleeding may be used with great benefit. Occasionally we observe the patient becoming very weak, owing to the circulation of carbonized blood through the brain. In these instances no remedy is more effectual than depletion by means of the lancet. Many cases have proved fatal from neglecting the important remedy. In relation to local depletion in this disease cups have been found more effectual than leeches, owing

to their more powerful irritation. If there is much pain in any portion of the chest, they should be applied over the part in which it is seated. If the patient does not complain of uneasiness in any particular portion, they should be placed between the scapulae.

The next most important antiphlogistic remedy we possess is tartarized antimony. It should be given soon after the bloodletting. It acts not only by controlling the circulation but also by promoting the bronchial secretion. If the patient becomes too weak to bear the depressing influence of this agent, stimulating expectorants should be employed and the best of them are squill, senega, ammonia and camphor.

For the purpose of allaying cough the most effectual remedies are narcotics, emulsions and in some cases a small quantity of morphia. In the administration of any of the expec-

ations of opium it is necessary to be very cautious from the strong tendency of this agent to arrest the secretions.

From the beginning of the case cathartics must be used. They act not only by clearing the intestinal canal of its irritating contents and thus allowing other medicines to exert their beneficial effects, but also as revulsives. In the latter stage of the disease when the system is much prostrated we should guard against the too frequent employment of vacuants. When it becomes necessary to empty the bowels the mildest aperients should be used. When the sputa becomes thick and viscid alkaline agents are highly useful as they have a tendency to render the secretion thinner. The mucilaginous preparations have proved to be highly efficacious in this disease and after the inflammatory excitement has been subdued no combination is more highly commended than that of calomel and opium to which

a small portion of Ipecacuanha may be added.

While employing the internal administration of medicines, the various means of establishing counterirritation should not be neglected. In cases of the asthenic variety, they are the agents, in conjunction with stimulating expectorants, upon which we place our main reliance.

When the system becomes prostrate it is necessary to resort to stimulants and tonics.

An

Inaugural Dissertation

on

Miasm, and its effects as manifested on the inhabitants of the "Northern Neck" of "Virginia"

Submitted to the Examination

of the

Provost, Regents and Faculty of Physic

of the

University of Maryland

for the

Degree of Doctor of Medicine

By

John B. Taylor

of

Westmoreland County

Virginia

To the traveler in Virginia no portion of the state is filled with more interest and at the same time with more awe and dread than that narrow, but fertile and well cultivated strip of land known as the "Northern Neck". This beautiful country comprising the counties of King George, Westmoreland, Richmond, Northumberland and Lancaster, lying between the bold and stately Potomac and the picturesque and romantic Rappahannock rivers, has been very justly styled the "Athens of the United States"

Among the many celebrated and renowned places of the world, none stand higher than this; here it was that God first "breathed the breath of life of him into the nostrils" of him whom every true hearted American loves as he does his own life; yes here lived, here ministered, the beloved, the adored, the honored Washington — Besides him, it boasts of having given birth to Monroe, to Richard Henry Lee, and to others equally as well known — And even now, I am delighted to point the tourist to pleasure in honor of the robust and vast intellectual spirits of the present age — For commerce it has, naturally,

no equal: situated between two navigable rivers, it enjoys a close and easy communication with Baltimore, Alexandria and Washington, and is thus enabled to transmit its vast products of wheat and corn to some of the first markets.
Its rivers abound in luxuries of the finest quality - oysters, terrapins and wild fowls, at all seasons, are no superior.
Thus located, thus highly favored and blest by nature, it aught to be, and is, indeed, the "Garden Spot of the world" - Inhabited by an enlightened and peace loving people, who can and do appreciate every blessing; who love their country more dearly than even the Sapiander; with every thing that nature and nature's God can give them; it would be a perfect Paradise, were it not visited every year with a plague worse than any of the seven which troubled and tormented Pharoah in the days of old - This plague, while it is at no time entirely absent from our much favored home; makes its principal invasions in the Autumn and Spring.
It is cabalistic, and really does assume various forms and characters; the principle one is which

are Intermittent and Remittent Fevers, the latter being comparatively rare — No one is exempt from the ravages of this frightful malady. It attacks alike the rich and poor (except where wealth enables one to protect himself from it, by remaining indoors) the young and the aged; and unlike the same disease as found in the "West Indies," and even in the southern portions of the Union, it attacks the white and black with almost the same degree of violence.

It invades particularly the low and marshy portions of the country; while that portion of it, remote from its low bounding rivers and creeks and marshes enjoys comparative freedom from the ills of its presence —

As this loathsome and most justly dreaded disease is always found in the neighborhood of rivers and marshes, and as it is a perfect stranger in those places which are far removed from them, to us, sources of evil; it has been argued and in fact demonstrated that there is something connected with these ill fated locations, which engenders, originates or gives birth to this vile disease.

What this "Something," this originator is; we have

not; we can only say that it is a poison (sui generis) emanating or rising from all low and moist lands. But of the composition or real nature of this strange and subtile poison, we know nothing, except that it really exists. Its analysis has as yet resisted all attempts of very learned and skillful chemists who has undertaken it. None have been able to detect any material change in the chemical composition of that atmosphere which is known to be most pregnant with its undiscoverable presence.

Is it a pestilence walking abroad in the nature of Animalcules or vegetable fungi? If it be either the most accurate microscopes in the hands of the most skillful observers have essentially failed to take cognizance of its presence. So unknown are its characters, so wrapt in mystery is it, that able and learned men have questioned its existence; but this negative belief has been so ably confuted to be received for a moment.

The circumstances or laws which govern and control this malarious poison are many and singular. In the first place it is much more dangerous at night than on the day. We know not whether

the poison be more freely evolved or whether it be merely more condensed by the coolness and moisture of the atmosphere or whether it be owing to the exhausted state of system during this period of the twenty four hours. It is probable that all these circumstances are combined; but does not the last appear to be the chief cause of its deleterious effects? Are we not more liable to be affected with even common colds at night than in the day? Are not all the muscles, (the voluntary ones) relaxed, more or less during sleep and cannot the seeds of this, as well as of any other disease, be more easily received into the system in this condition?

The facts on record proving this statement are very numerous - Many are the instances of persons being attacked at night and escaping during the day. This, among sailors is notorious. Again and again have we seen accounts of one portion of a crew being affected and the other not - those attacked always being those who remained on shore at night, while those who returned to the ship at night even after having passed the day on land in the malarious districts were entirely exempt from

its destructive influence.

2nd. This poison seems to be rendered innocuous by passing over an extensive body of water! Is it absorbed by the water?

3rd. "It loves the ground", as is proved by its dwelling principally in low places. Whether this be due to its greater specific gravity or its affinity for moisture or both combined is not known - but that it does seek the lowest places is a fact too well authenticated to admit of doubt. The inhabitants of Thessalonica are aware of this circumstance, and they know that of the people occupying the same house, those on the lower floors are more subject to its effects than those of the upper stories.

4th. This poison is moveable by the wind. And in this way we can account for the many seemingly contradictory circumstances of its strange presence in places foreign to its natural locations. How far it may be carried in this way is unknown. Thus it has been shown that it prefers low grounds, yet it may be carried by the wind to considerable heights and to great distances. Bird -

5th. Its progress seems to be arrested by trees and

forests. Do they, like water, absorb it? Dwellings built in marshy places may be, in a great degree, protected by encircling them at a little distance by a belt of trees.

6th. Cities even in malarious neighborhoods, appear to enjoy a comparative freedom from it; owing probably to the fires which tend to free the atmosphere from its noxious effluvia. While the suburbs are very often greatly troubled, the interior is exempt from its ravages.

7th. Cultivation of the soil seems to effect materially the miasmatic influence. Thus, the more thickly a country is peopled, and the more highly the lands are cultivated, the more healthy do its inhabitants become; and conversely the less so.

Besides these laws which govern the poison after it is generated, there are others which modify its generation - viz: Heat, Moisture, and Vegetable Decay. 1st. Heat has been known from the remotest ages to be necessary to produce this miasma - and not only moderate heat and a limited or short period; but it must be [illegible]

and long continued. The nearer we approach the Equator the more prevalent does the disease become: yet heat, of itself, will not produce it. If the Thermometer (F) stands above 75° for several days together, after several heavy rains, we, of the "Northern Neck" know that the "Chills" will soon make their appearance. 2nd. Moisture, like heat seems to be indispensable in engendering this poison. No matter how intense the heat unless we have rains or heavy dews we are comparatively safe. Yet our marshes are all the time more or less covered with water; but when this water has dried up, the ground become dry and hard, and we then have rain — accompanied with a few days of hot weather we are certain to be attacked. Moisture alone is not able to produce this effluvium, neither can it produce it combined with heat: if it could, why is it that sailors who are confined to shipboard where they are exposed very often to their combined influence, are exempt from the ravages of this miasmatic poison.

This leads us in the third place to conclude that vegetable decay is absolutely necessary to produce chills and fever - Yet we have many well authenticated instances on record of their being found in sandy plains where there could not be discovered the slightest trace of any kind of vegetables - but this is accounted for, by those who wish to prove beyond all doubt, that this last element is absolutely one of the essentials, to its formation, by saying that there may be in this hot and burning sand, the seeds of vegetables, deposited there probably by the wind, or naturally - (for we know that earth dug from a vast distance below the surface will in a short time give birth to various kinds of plants) and that these are decayed by means of the heat and moisture - Or its effects may be conveyed to these sandy wastes by the wind for while it is known positively that it may be carried a vast distance by its agency; it is not known how far it may not be carried -

This poison, as said before, manifests itself in various ways; but the two forms of disease that it most often produces in the "Northern Neck" are "Intermittent" and "Remittent Fever" the former being the more common. The natives of this country, after arriving to an adult age, have as a general thing become more of less acclimated, and are not so far as much as the young, and especially as the stranger who may chance to visit us. If he happens to come in the Spring or Autumn, and remains in a neighborhood where this poison is generated, sometimes for a few days only, he is attacked with one or the other of these "Fevers". Strange to relate, he may escape the first year, and generally does; but in nine cases of out of ten he will suffer the second.

When first taken, he probably feels for a day or two, more or less unwell; his Constitution becomes considerably altered, being unusually sallow, which is often noticed by his friends before he himself is aware of

his indisposition; about this sometime his disposition or moral character becomes much changed, instead of the cheerfulness which usually characterizes him, he is gloomy, morose and at times melancholy. Thus he lingers on for a few days, when at last he "has a chill" he feels cold, with a sensation of chilliness or shivering, upon every motion; with a aching in his back and dull, aching uneasiness in his limbs: Often, this uneasiness or aching in the limbs is about the first as well as about the worst sensation he feels. He is not yet sick enough to go to bed; but places himself before the fire, turning first one side and then the other to it, vainly seeking relief - freezing and burning as it were, at the same time - his thirst is now greatly increased; little or no appetite - more or less nausea, and sometimes decided emesis; his extremities become cold his nails and lips purple; his skin contracted like "goose's flesh": he yawns and gapes, and stretches, but all in vain.

In this condition he remains for a variable length of time. When his chilly sensations begin to assume a decided and very marked change - He is now very warm his whole surface becomes flushed; reaction more or less complete takes place, not suddenly, however, but very gradually - he still feels a shivering every time any part of his body comes in contact with a cool portion of the bed - he experiences these alternations of heat and cold, until finally all coldness passes away and he is excessively hot, burning, with an increased action of the heart and by its means his pulse - with an aching (often acute pain) head; very great thirst, and lightness &c. &c. in short he has arrived at the second stage of this wonderful attacks or in other words he has "fever"

After an uncertain period this second stage passes off or gives away to the third or Sweating Stage. At first there is a slight moisture perceptable on his forehead, and from this it rapidly spreads over the whole body -

and with a relief of the pain in the head as well as the subsidence of all other uneasy sensations - even not with fatigue exhausted by much and severe suffering he sinks into a calm and gentle sleep - being when he awakes much refreshed and often feeling a vast deal better than he did previous to the attack - He remains as still about the same time the next day, or probably the second, third, or even the fourth day when he is attacked by a similar paroxysm. It may have several of these at backs returning not only on stated days, but at the same hour every time. Why they thus come on periodically the most learned and distinguished men of all ages have been and are still, and probably ever will be, entirely ignorant. Very often, instead of the second stage, giving away entirely to the third, it only does so to a certain extent, thereby keeping the unfortunate victim all the while sick - This is "Remittent Fever"

For the treatment and cure of this strange disease there have been a great many remedies, from witchery and nonsense to the most applicable and reasonable therapeutical measures but unfortunately for us, as we know little or nothing of its nature, we have to be satisfied with empirical means - and of these we have probably the only Specific found in the Materia Medica - viz: Quinine - Taken in the proper doses this medicine almost always prevents another attack - By some it is given in very small quantities two or four grains often repeated, by others in a large dose ten or twenty grains just before the expected attack - It may be given either with or without any previous preparation; generally however after the alimentary canal has been fully evacuated by a good dose of Calomel -

An
Inaugural Dissertation
on Pneumonia
Submitted
To the
Consideration
of the
Provost, Regents,
and
Faculty of Physic
of the
University of
Maryland
For the Degree
of
Dr. of Medicine
By
Benj. A. Cameron,
Newport Chas Co.
Md.

1854. Feb. 2d.

Gentlemen.

The theme, which I have chosen from choice, is that of Pneumonia; and before proceeding to the minute details of said theme, I must beg to be excused on this subject, owing to the little knowledge which I have of it; and judging from the rigid aspect which it presents to the eye, it seems almost impenetrable for the weak & feeble pen of a student, the mind of whom is not as yet filled with sufficient wisdom and learning to give him light upon this subject, which has more than once excited the attention of eminent and skillful men of the profession. I may then be allowed to make a few superficial remarks upon it, which however I know will not be in accordance, with the solidity of the subject. Pneumonia has been defined, in medical language, to be

an inflammation of the parenchyma of the lungs. - There are three well-marked stages of the disease, e-marked by characteristic pathological conditions of the organs.

The first stage is that of engorgement, or congestion; the lung is more dense & reddened, with occasional slight effusion; but no consolidation; air still penetrates its vesicles, it floats upon water and crepitates on pressure. When pressed, a frothy serum exudes.

The second stage, or that of hepatization, is marked by a still greater congestion and effusion into the vesicles and smallest bronchial tubes, and into areolar tissue. The matter effusion is either blood or fibrine. When cut open the lung has a granular appearance & is consolidated, it sinks in water and does not crepitate on pressure, and when pressed it emits a bloody serum.

The transition, of the first into the second stage is gradual and partial.
The third stage is that of suppuration; called also gray hepatization. The colour of the lung, is a grayish yellow: it is still solid & smooth; the effused matter is converted into pus.
Portions of the same lung, at the same time, may be, in the second & third stages. If the suppuration be circumscribed, it constitutes pulmonary abscess. However it is not a very dangerous sign, as very extensive suppurations would not destroy life before the formation of an abscess. In asthenic cases, the disease can not advance beyond the first stage before softening occurs, the whole tissue being reduced to a mass, lacerated splenization. Pneumonia may be single or double, or in other words it may attack, but one lung, or both at the same time. It is generally thought

by most medical men of the profession that Pneumonia attacks the right lung more frequently than it does the left lung. Another form is named lobular Pneumonia, where numerous distinct spots are affected, so called lobules; it is usually caused by bronchitis and generally found in children. abscesses are not uncommon in this form of disease, as each lobule runs through all three stages. it has been thought that the upper pulmonary lobes are scarcely ever attacked with inflammation. but this statement is now known not to be correct. this discrepancy may be reconciled, as Dr Williams has observed by assigning the cause of it, the fact that inflammation of the upper lobes is most frequently fatal and according to others generally dependent on the presence of tubercles. Gangrene is able to result in depraved constitutions.

In some there is a peculiar tendency to it, even without any great previous inflammation. Sometimes gangrene may be diffused; at others it may be in isolated spots. When there is a deposition of pus in the minute bronchial tubes, the term capillary bronchitis is given to it. This brings us to the symptoms, which are as follows, viz; There is generally a decided chill at first, followed by fever; at the same time, or soon after, pain more or less violent is experienced, in the side, breast, or back; and sometimes it is very acute, when complicated with pleurisy, since the true lung, pain is rather dull, and is often referred to the ensiform, or to the nipple on either side. Respiration is quickened: the cough is at first dry and attended with bloody expectoration. The sputa are viscid and tough, not very copious, and

of a rusty colour, being a uniform mixture of blood, but very different from the streaked sputa in acute bronchitis, unless it be complicated with Pneumonia. Occasionally they consist almost of pure blood, except in Typoid cases, where it is a black colour. Headache is a very common attendant, arising from a deficient aeration of the blood in the brain. The flush on the face has a darkish hue, often circumscribed and only on one cheek, according to some and on the same side as the disease. The blood when drawn, looks like that taken by means of cups. To make a true diagnosis, it is necessary always to examine the patient's chest. Thus we come to the physical signs observed in the course of this disease, Pneumonia, viz: In the first stage, or that of congestion, there is slight dulness on percussion, and diminished respiratory murmur,

but very soon the characteristic crepitant Ronchus is heard, especially if there is a rusty sputum. Sometimes you cannot hear it only on deep inspiration. On the other parts of the chest, the respirations, may be in a measure puerile. The crepitant ronchus is caused by the separation of the adherent walls of the vesicles in inspiration and resembles somewhat the rubbing of a lock hair between the finger and thumb. The sound indicates engorgement of the lung; and is a proof the inflammation has not passed the first stage. As long as natural respiratory murmur predominates over the crepitation, we should infer that the amount of inflammation is slight, but when crepitation prevails so as to mask the respiratory murmur, it is a sure indication that Pneumonia has made progress and that it has a tendency to pass to the second stage.

These phenomena soon change either by the resolution of the disease, or by its making further progress. In the former case the crepitation diminishes in extent and intensity; the murmur of respiration approaches its natural state, the sound of the chest comes less dull, and its movements more regular. Next comes the second stage. The second stage of Pneumonia, is that in which the lung presents that change which is called red hepatization. In this condition the cells being obliterated, while the large tubes remain pervious, dullness on percussion, bronchial respiration and a loud resonance of the voice, are produced; the extension of this sign furnishes within certain limits, an accurate measure, the extent of the disease. The bronchial respiration marks the second stage of pneumonia

inflammation; often at the same time the crepitant ronchus may be heard in the adjacent parts.
If the patient recovers from the second stage and the infiltration diminishes, so that air is again admitted to the minute tubes & vesicles, this is announced by a return of small crepitation, which is favourable.
And progressing thus far, we arrive at the last stage. In the third stage the diseased lung becomes infiltrated with a purulent matter, which is generally consistent at first, but soon becomes like pus. In this stage a peculiar muco-crepitating ronchus is heard, first in some points only, and then in the whole affected part. This commonly announced by the recurrence of a chill, and the expectoration of a jelly-like sputum. Now convalescence commences about the end of the

first week, if the disease has not progressed beyond the first stage; at the end of the second or third week, if it has advanced to the second stage, and if it has proceeded to the third stage, the period of recovery depends altogether upon the constitution. When an abscess forms in a hepatized lung, the passage of air through the liquid, will be indicated by the gurgling, or cavernous rattling; — and when the cavity has been emptied of the pus, by expectoration, pectoriloquy and the cavernous respiration will then be added to this sign. Pneumonia may also terminate in gangrene; but this is almost as rare a termination as abscess. The distinctive physical sign of gangrene is the fœtid odour emitted from the diseased part in respiration and cough; and the expectorated matter is also extremely

foetid: this change is usually attended by a collapse of the features, and great prostration of the vital powers. Occasionally the inflammation may be so confined to the centre of the lung, as not to be evident by the physical signs; in that case, the rusty sputa becomes a very valuable indication.

In Pneumonia of old persons, the crepitant Ronchus is not heard, because the effused matter is not tough enough to afford the sound, but it is replaced by a submucous and subcrepitant sound.

The sounds of lobular Pneumonia are not always certain. It may be presumed to exist, if the inflammation occurs in a child, after Bronchitis.— First a submucous sound is heard throughout — followed by some crepitus and bronchial respiration. Pneumonia is sometimes complicated with hepatitis, especially, where the

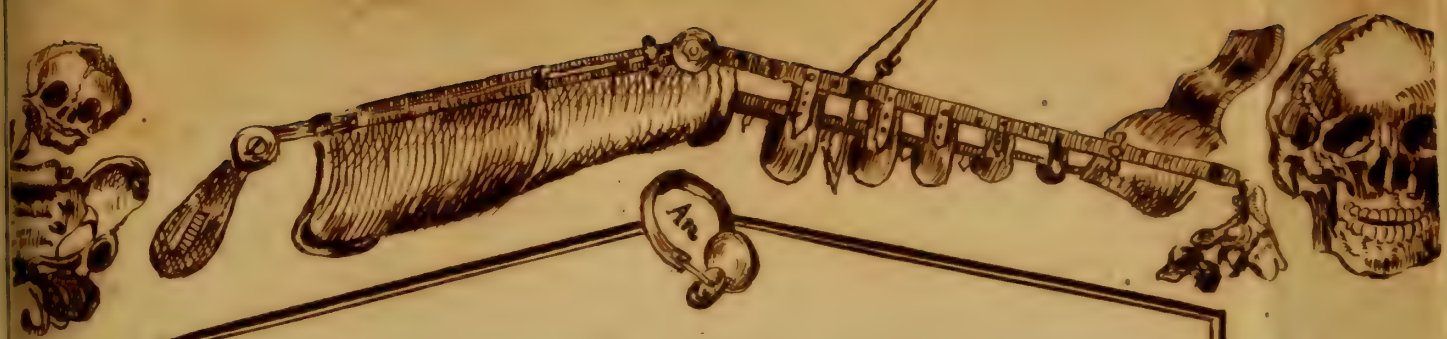
lower lobes are involved. In that case, there would be tenderness, I presume under the ribs and some yellowness of the skin. If associated with miasmata, it would assume a paroxysmal form. But Typhoid Pneumonia, there is less pain and expectoration of pure blood or else of very dark matter, general feebleness, dry tongue, sordes, no crepitation, or crepitant ronchus, but a subcrepitant sound. Pneumonia sometimes developes tubercles in the lungs, in those who are predisposed. There are certain diseases with which we are apt to confound Pneumonia, which I must not neglect to mention; they are bronchitis, pulmonary oedema, pleurisy, and certain stages of Phthisis. All that I wish here, is to mention, some of the characters, by which we may distinguish this disease from bronchitis. Only in those cases of

Bronchitis extending to the minute ramifications of Bronchia, the resemblance presented is so great to Pneumonia. But in Bronchitis, the sensations are more those of soreness, than acute pain, and most generally are seated in the anterior and upper part of the chest, behind and near the sternum. Although sometimes the expectoration is streaked with blood, it never has that viscid and rusty coloured sputa like Pneumonia, & when it does begin, it is much more copious; no true crepitant rale is heard, but the dry and mucous rales are: no bronchial respiration or reconance, very seldom a permanent want of the respiratory murmur in any part of the chest: and last of all, there is no considerable dullness on percussion. Notwithstanding the difference of symptoms, tis difficult to distinguish between them.

Next most important comes, treatment, after a true Diagnosis having once been made. This is various in different stages according to the disease. In the first stage, in good constitutions, free bleeding is absolutely demanded, and sometimes it may be repeated. If this be postponed until Bronchial respiration occurs, it will do but little good. In the beginning of the second stage, bleeding may also be practised. It should be followed by an active purge, after which Lactalives will suffice. Never commence with the antimonials, viz. Tartar Emetic, from one sixth, one eighth every two hours. If the skin be hot, use the refrigerant diaphoretics. And after given Tart. antimony two or three days, give a full dose of Dover's Powder with a small dose of Calomel at night. In the second stage, general bleeding should be used very cautiously.

Cups however may be freely applied, with advantage, followed by blisters and the mercurial plan, should be commenced, Calomel and Dover's Powders being given until salivation is produced. Still later, Stimulant expectorants may be used, viz: Senega, Ipecac, or Tart. antimony with Opium, and in gangrene the stimulant and supporting plan is demanded; as quinia, Carb. ammo. Wine or Brandy, with creasote, Chlor. Zinc & Lime and mineral acids generally. In bilious pneumonia, the only difference in treatment is to commence, with mercurial plan at once, together with bleeding. In the miasmatic form Quinia should be given. In Typhous pneumonia, general depletion, is inadmissible, cupping and blistering may be used & it requires a early use of Mercury combined with Opium & Ipecac, as well as Carb. Ammo. & Wine. and finally, in Chronic cases, the treatment is to be moderate topical depletions, blisters & a mild protracted course of Mercury.

B.A.S.



Inaugural Dissertation

on

STRABISMUS

Submitted to the Examination

Of The

PROVOST REGENTS AND FACULTY OF PHYSIC

of the

University of Maryland.

For The

Degree of Doctor of Medicine

By

CHARLES BREWER

of

Maryland.

To Prof. Gurdon R. Smith M. D.

As an humble tribute of respect to his acknowledged Genius, Experience & Success, as a Surgeon, and in appreciation of the valuable benefits derived from his Public & Private Instruction, and to

Express my profound admiration of his Acquirements in the Science of Anatomy & Physiology, and his Zeal in Imparting its Truths.

And in Grateful Remembrance of the many Kindnesses received at his hands — is Respectfully dedicated this little Work by the

Author.

It is the province of the Poet to illumine Humanity. [illegible]
[illegible] the operation of [illegible] mind
[illegible] the same
[illegible] mind
or [illegible] each [illegible]
[illegible]
[illegible]
[illegible]
no external index or [illegible] and
the [illegible] Comparable [illegible] Humanity.
And sympathising with [illegible] Poet, the
[illegible] imagination [illegible]
[illegible] and [illegible]
[illegible] as [illegible] time and [illegible]
[illegible] in [illegible] words [illegible]
the [illegible] of [illegible]

Between [illegible] dark, [illegible]
[illegible]
[illegible]
[illegible]

[illegible]
[illegible]
of sight; [illegible] such harmony in its com-
plicate structure [illegible] such perfect adaptation
to the purposes for which it was designed, [illegible]
[illegible] in its
simplicity. [illegible]
[illegible]
[illegible]
[illegible]
[illegible]

Of all the senses with which man is [illegible]

[illegible] sight, [illegible]
associations [illegible]
[illegible]
[illegible] that of sight. [illegible]
[illegible] connection [illegible]
external world and the inner man: the [illegible]
channel through which [illegible]
[illegible] impressions [illegible]
[illegible] the mind [illegible]

and furnish [illegible]
[illegible] meditation. [illegible]
Among the greatest blessings [illegible]
[illegible]
having [illegible], [illegible]
[illegible]
[illegible]
[illegible]
more [illegible].

[illegible] mortal [illegible] man
Or sight [illegible]
Or [illegible] human [illegible]
[illegible] alone. [illegible] great [illegible]
[illegible]
[illegible]
[illegible] in [illegible].
[illegible]

[illegible]
makes no [illegible] distinction [illegible]
[illegible]
[illegible]
which [illegible]
[illegible]

Really the organs of vision are so numerous [illegible], that the profession has deemed proper to establish separate & distinct schools for their study & investigation, and to consider that a [illegible] relates to their diseases & [illegible] a separate & distinct [illegible] [illegible]

[illegible] cases much not unfrequently occur in the practice of the [illegible], [illegible] the future condition of the individual as one of joy or misery, is great, equally so is the satisfaction of having [illegible] the consciousness of [illegible] duties [illegible] and the gratitude [illegible] for the inestimable benefits of [illegible] or restoring sight.

[illegible]

The [illegible] [illegible] of [illegible], the [illegible] or [illegible] and the [illegible]. The former [illegible] number [illegible] the [illegible] of the [illegible] of the [illegible], [illegible] the [illegible] the [illegible]

Plate 1.

Fig 1. insertion of recti muscles.
Fig 2. origin of. do do
Fig. 3 & 4. 1. Superior rectus - 2. rectus inferior - 3 rectus internus - 4. rectus externus. 5 obliquus superior (trochlearis) 6 Obliquus Inferior. 7 Trochlea.

expanded tendons: their points of insertion being unequal distances from the margin of the cornea. They are named [illegible] & inferior, internus & externus; according to either their situation, or action. Any two of them acting at the same time, draw the eye in a direction intermediate between those in which each would act separately. They receive their nerves - the rectus [illegible] is furnished from the 3rd pair of cranial nerves the Motores [illegible] the Abducens or 6th pair.

[illegible]

draw a line from the upper & inner border of the foramen opticum, passes up and inwards towards the internal angular process of frontal bone, passes its tendon through the cartilaginous ring on the under surface of that bone, and is inserted into the sclerotic

[illegible]

The inferior [illegible] and [illegible]

[illegible]

[illegible] [illegible] , [illegible] from [illegible]
plate of sup. maxillary bone near the internal end
of lachrymal groove, passes outward & backward,
its tendinous expansion passing between ext. rectus
and globe of the eye to be inserted into the external
& posterior aspect of sclerotica, beyond its middle

[illegible] 3rd pair [illegible]

[illegible]

According to Wilson the contraction of the [illegible]
oblique rolling the globe upwards & inwards, [illegible]
[illegible]
[illegible]
upwards & outward.

as directing the pupil upwards & inwards.
In regarding an object with one eye, we close the
other, [illegible] [illegible]
directly of the cornea through the lid, or producing in
the other eye a sympathetic motion of the [illegible]
of the eye first closed is distinctly perceived.
This motion also occurs when asleep or during [illegible]
the vertical axis towards the [illegible] of the [illegible]

[illegible]

or lost. Mr Bell first noticing squinting, & investigating the cause of this phenomenon, concluded that it was owing to the incessant contraction of the oblique muscles, and that altho' power resided their peculiar use as distinguished from that of the recti: granting this, then would claim and with some plausibility, the same action, for the recti, as they are in common with the oblique supplied by the 3rd pair of motors. Denying however this assumption, Mr Bell's argument with regard to the obliquus subtilis remains invalidated, and he is not justified

Strabismus (στραβίζω. I squint.) A term to designate which we have thought proper to bestow above remarks with regard to the anatomy & physiology of the muscular apparatus of the eye, may be defined to be that disordered disease of the organs of vision, having as its direct cause the deviation of the axis of vision of one or both eyes from the normal direction. This deviation is produced by altered, irregular action, induced in

the abnormal physical condition of one or other of the muscles to which its motion is due.
It may be single or double - according as one or both eyes are affected: convergent [illegible] inwards or outwards: the former is far more frequent. In some hundreds of cases Mr Lawrence met with but one case of the latter: Mr Critchett reports but 8 cases in one hundred: Mr C. F. Hall [illegible] in 200 cases, of these 32 only had divergent squint.
That Strabismus is a deformity is a self evident fact: but as our definition admits it is a disease not only of deformity but also of impaired & disordered vision: as proof of this we quote the London Medical Gazette Vol. XXVII. p. 4. Dr Franz here states that to a greater or less extent weakness of vision existed in all the cases in which he had operated, or which had fallen under his observation and in 200 cases seen by Mr Hall, in every instance with the exception of two, was the sight of the squinting eye weakened.
In its acute form, Strabismus is produced by some

disturbance of the natural balance of nervous energy on which the eye is dependent for its regular motions, and appears as a symptom in derangement of the encephalon, or may be brought about by voluntary action, as idiopathic. Continuance of the exciting cause gives rise to the chronic form or variety. Difference of opinion has existed, or may still exist, as to whether this permanent condition is owing to atrophy of one muscle, or hypertrophy of its antagonist, and in order that we may be enabled to detect more accurately any deviation from the normal condition which may exist, let us first examine or determine the nature or physiological condition of these parts.

Mr Quain considers the rectus externus as exceeding the rectus internus in length, the latter having advantage over the rest as regards width, the superior being somewhat the narrowest of all. Mr Wilson regards the internus as thicker, shorter, & inserted nearer to the cornea than the externus. It is apparent to every intelligent mind, that in a healthy state of the system more frequent and vigorous exercise of one member or portion of the body

Compared with the rest, as in the case of the black-smiths arm or woodsawyers back, causes a proportional increase of the amount of tissue & nervous energy of the part, and that this increase of the one is not necessarily accompanied by nor at the expense of loss of power in the other. No substantial reason can be given why this fact should not hold true with regard to the muscles of the eye; on the contrary whenever opportunities have presented themselves for minute examination, such has been fully proven to be applicable. Mr Middlemore in his Practical Treatise Vol 2. p. 56 relates a case where he found after death, in divergent squint ~~he found~~ the Ext. Rectus of the affected eye much larger than natural, & than that of the other eye. Mr Lucas records several instances where he found the rectus internus unnaturally enlarged in cases of convergent squint. Again if there did occur an atrophy of the one in direct proportion to the hypertrophy of the other, certainly we should expect to find in at least some degree the same effects as where there occurs paralysis of one of the antagonizing muscles - to wit - on closing the sound

eye, that the axis of the affected eye should refuse, in some measure, or at least hesitatingly to return to its proper direction: the fact therefore of its prompt by doing so in the former case, argues the integrity of the opposing muscle.

The causes of strabismus are many & various. Of cases observed by Mr C. R. Hall. 30 were attributed to imitation of the defect in others. In one family which came under his observation where the mother squinted, her five children presented the defect, which could be attributed to no other cause than the above: and where a father was affected in the same way being rarely at home none of several children contracted it.

It not unfrequently arises from the acquired habit of distorting vision, as during infancy where the child is placed in a cradle the window being on one side and the nurse or some bright object on the other: or where the eye is directed to a scar or mole or tumor on the nose - or at either angle of the eye: also that not infrequent habit among children of sucking the thumb, and at the same time steadfastly fixing the eye on it.

where there exists partial opacities or an ulcer of the cornea obstructing vision, or capsular cataract where only a portion has been removed - in such cases as these latter, it may be regarded as an expedient of the "vis medicatrix naturæ" by changing the direction of the axis of vision, thus to get rid of the obstruction. It may also arise from ophthalmia accompanied with excessive photophobia, the pupil being directed upwards & inwards to exclude as much light as possible. In fine this distortion may be effected by any disease of the eye which by excluding the retina from its accustomed amount of light, thus renders it morbidly sensative.
Again it may display itself during acute or chronic inflammation of the encephalon: in hydrocephalus in organic changes: in the developement of tumors or tubercles within the cranium. in the convulsive struggles of epilepsy; during apoplexy or the ~~ex~~ paroxysms of pertussis: the pressure from vascular congestion is here evidently to be considered the proximate or direct cause of the phenomena. In these attacks there is first derivation of blood from the brain & from extremeties, determination to, distention of, & remain

the vessels of the neck & head, this follows the presence of or some amount of lesion in one or other of the vessels which enter the orbit. When strabismus comes itself during dentition, or supervenes on repeated convulsions from gastric or enteric irritation, from worms, or constipation it may be attributed to the sympathy of the Cerebro spinal nervous centers in this remote irritation.

When the causes of a disease are so various, of course it is impossible to prescribe any special remedy adapted to every case: each must be investigated for itself and medication directed accordingly. When the disease is acute or dependent on some local cause, our efforts must of course be directed to the removal of such cause; as by the employment of aperients cathartics, anthelmintics, tonics or antacids in disorder of the digestive apparatus: or depletives or counter-irritation in vascular congestion. Rarely if ever however we are called on to treat this affection in its acute form its presence should direct our attention to more serious organic brain threatened else where.

Mechanical arrangements or contrivances have held at various periods a prominent place among the

means proposed for the cure of this defect when it has become chronic. Optical glasses of various descriptions have been resorted to: the methods devised have ~~have~~ however mostly had reference to the systematic education of the affected eye, some employ black patches to the nose or brow, bandages & the like. These expedients have occasionally met with success but such cases are exceedingly rare. They are generally instrumental only in transferring the defect from one eye to the other: few have the patience to employ them sufficiently long, and above all it is an absolute impossibility to render children submissive to treatment of any such character. The most reliable and in fact only reliable remedy is found in the science of surgery and in the hands of a dexterous surgeon there are scarcely few operations more scientific, or more highly satisfactory with regard to their results.

With reference to its effect on vision, my success met with no case where the sight was impaired. In many it was directly improved in a few the original imperfection of vision remained, whilst in all the deformity was removed. Dieffenbach

Gathier, Duffin all corroborate this statement & give even more satisfactory evidences of its nature & success.

The Internal variety as a result of the operation for the internal variety is exceedingly rare. Mr Gathier & Mr Lawrence each met with but a single case of the kind. Mr T. R. Smith in his extensive experience in this affection, having operated nearly some 200 times met with but one case of like character. here he found that the operation for int. strabismus had been performed also, & when seen by him the call seemed entirely under control of the superior oblique, being rolled upward under the superior palpebra.

Before describing the methods of operating for strabismus, it is proper for us first to inquire under what circumstances such operations would be considered advisable and when not. It is contraindicated in all cases where the affection is recent the exciting cause being still in action as in hire it proceeds from intestinal or cerebral disorder; diseases of opacity of the cornea, and particularly when on closing the sound eye, the squinting in the other is not obviated.

It is advisable to delay proceeding when it has become painful, and then on crossing the sound eye the axis of the other is perfectly & promptly restored. The instruments used are various to suit the taste of the operator, the general features of the operation are however much the same and these consist: First in fixing the eye, second in the division of the conjunctiva exposing the tendon of the muscle: third the elevation & division of the tendon. In Mr Dalrymple's operation an assistant is employed to elevate the upper lid, the eye fixed in position by transfixing the conjunctiva with a tenaculum; the conjunctiva being divided, the tendon of the rectus is raised by passing beneath it a grooved director and its division effected by means of a small curved knife.

Mr Lucas applies a wire elevator to the upper palpebra - transfixes the conjunctiva with a tenaculum - but in the third step substitutes for the knife a common sharp pointed scissors.

It is not our present purpose, nor is it at all necessary to enumerate & describe the various modes of operating as performed by different surgeons

And we shall therefore conclude by a brief explanation of the method of operating in this case as recommended & practiced by Dr. Von Graefe. The patient being seated in a good light and the head supported on the breast of an assistant, the eyelids are separated by means of a speculum of silver wire such as represented in Pl. III. the patient directed to look outwards, the conjunctiva seized by a small, delicate, curved blade toothed forceps as seen in (Pl. III.) at a point midway between inner edge of cornea & caruncula lachrymalis forming thus a horizontal fold. With a stroke of a small, blunt, sharp pointed scissors (Figure 2) a vertical incision of sufficient length is made near & external to forceps & between forceps & inner edge of cornea, which gaping exposes the tendon of the muscle.
This is then elevated by insinuating beneath its lower edge a curved blunt hook: the forceps being then loosed from the fold on the conjunctiva having given place to the hook, passing one blade of the scissors beneath the elevated tendon close to the hook by a second stroke of the scissors the tendon is divided and the operation complete.

After allowing the patient a few moments rest he should be directed to look directly forward, and if the distortion is not perfectly obviated, it is to be presumed that all the fibres of the tendon have not been completely divided, the eye is to be carefully examined, & such fibres being found, raised & divided after the manner of the above, the distortion will then have been entirely obviated.

This mode of performing this operation we believe superior to any other now practised, both as regards its simplicity, facility & superior efficiency: the instable & often ineffectual efforts of assistants to prop the lids being avoided as also the irritation likely to supervene on the dragging tension of the bridle, forcing the conjunctiva. As a general rule Chloroform has from its introduction into the science of Surgery been contraindicated in cases where it became necessary that the patient should exercise voluntary muscular motion, and also in the operative surgery of the eye. Of late the operation has been not unfrequently performed, during Anaesthesia

from this agent. So far as our experience extends we consider its employment in such cases as the present entirely superfluous. We have seen the operation performed in at least some twelve instances by Prof Smith, and in several instances where every effort so far as muscular motion of the globe of the eye was concerned, seemed to thwart the defeat of the object of the operation which was notwithstanding completed with perfect success.

Occasionally a small red bead like granule may be seen protruding from the wound a few days after the operation by some surgeons to be a fungous protrusion, but no doubt only a protruding portion of the extremity of the tendon. This if suffered to remain will drop off, of its own accord, but may if thought proper be clipped away with the bent scissors.

The after treatment of the operation for strabismus is very simple, in most cases requiring only that the sound eye should be immediately bandaged, and that operated on exercised till not exposed to too irritating a light, or in situation

where, sand, dust, or cynders might be admitted thus lighting up inflammation. Should this occur to any extent worthy of notice, keeping the patient in a state of rest in a mild light due attention being paid to regulating the diet & the bowels will be found amply sufficient to relieve every unpleasant symptom.

An

Inaugural Dissertation

on Epilepsy

Submitted to the Consideration

of the

Provost and Faculty of Medicine

of the

University of Maryland

For the Degree of

Doctor of Medicine

By

John H. Hunter

of

Virginia

1833

Epilepsy

I do not propose in this essay to go over the whole ground which the physiology, pathology and treatment of the disease would require much research and investigation would be necessary, for which I neither have the time or ability to enter into. A great deal has been said and written about it and to what avail it all amount merely to show how little ignorant of its causes and how futile our efforts heretofore in curing it. Its history dates as far back as that of the ancient Egyptians, long before the time of Hyppocrates the father of medicine. It is spoken of in the New Testament. Mat. chap. 17. Ver. 15. The Romans gave it various names among them was that of Morbus Comitialis so called from the fact that in the comitia or popular assemblies if a man was suddenly seized with the disease it was

ainary

ulty

long

considered a bad omen, and the assembly immediately adjourned.
It was also called the "mother-spasm" or "sitting" because from a custom that had of sitting in their room to avert the unfavorable omen.
"Seat of disease" there seems to be some doubt in regard to the exact location of epilepsy. That the cerebro-spinal centre is affected is beyond a doubt for if the disease continues for any length of time the mind becomes more affected and eventually delirious. but whether it be centric or excentric. that is whether the brain and spinal cord be first affected or the lesion be dependant upon irritation of some distant organ. is the question. Doctor Marshall Hall says, "is yet a matter of dispute.
From the writers on the subject I have compiled the following. Very few of Epilepsy has its anatomical seat not

so much in the brain and spinal cord as in the organic system of nerves. [illegible] it is little more than an irregular form of intermittent hysteria. again a recent author has supposed the medulla oblongata to be the seat of the disease. he draws his conclusions from the fact that sight pressure upon it causes in infants convulsions and yet he finds produces a condition of which phenomena are observed in the disease in question. but this is mere speculation. other diseases such as Chorea. Tetanus and Hysteria may be [illegible] in the same [illegible] in regard to the first hypothesis. it should be remembered that the [illegible] is so interwoven with the other portions of the nervous system that it could not actually be [illegible] of them in the production of disease

I agree with Dr [illegible] in [illegible]

that there is no strict basis for the division of Epilepsy into centric or excentric but that it is the same disease whether dependent upon a tumour within the encephalon, upon worms in the intestines or a mere morbid excitability of the brain, which throws it into derangement from ordinary causes.

Causes. Epilepsy is not considered a hereditary disease. Instances have been mentioned where it remained in certain families for several centuries, altho' not strictly hereditary. Nevertheless it may be readily developed in persons whose parents, either one or both of them have been epileptic, or have suffered from some cerebral disease, some mental or have been distinguished for some eccentricity of mental feature. Certain forms of the head are often observed in epileptic patients, but we cannot say whether this deformity is caused by a deficiency of intellect, which in its

tum producing idiocy. but certain it is that among those persons whose foreheads are low and receding, or sugar loaf in their shape, the disease is very common

Among the exciting causes may be mentioned the inordinate use of ardent spirits, intense exercise of the intellect, fever, contusions, injuries of the head, suppression of habitual discharges whether natural or artificial, arising in females, from suppression of the menses and in males from the sudden cessation of a mucoid discharge which has become habitual. Tumours of the head which impinge upon the brain producing inflammation either of the membranes or the substance, may help often give rise to epileptic convulsions, it remains for us whether congenital or accidental have been the exciting cause. A case is mentioned in one of the London Lancet, where the convulsions were caught in

by the patients taking a very large dose of Spirits Terebinthine and afterwards exposing himself to the cold night in this case is also interesting from the fact of a permanent cure being effected by the use of Cotyledon Umbilicus.
Worms in the intestines, stone in the bladder and the mineral poisons have produced the diseases. In some persons sexual intercourse has been the immediate cause. it is said that Napoleon Bonaparte had an epileptic fit in the midst of the anxious and exciting scene of his great battles. brought on by having intercourse with his wife. Mainly from force of habit imitation has induced. it is sometime mentioned that a whole school was thrown into convulsions by a single epileptic.
Symptoms. These may be divided into the premonitory and post. During and after the attack. The patient is affected in several ways. some have what is

called the aura epileptica a peculiar sensation which affects them in a variety of ways. They sometimes feel as if a spider or flea was crawling over their body. at other times it seems to be a cold fluid in the skin and running along some particular nerve. This has given name to it. as it has been ascribed to a rush of air or wind. Elliotson mentions a case of a boy who had two auras which ran up from the closure of his feet to the epigastrium. where their stream. This point he fell down in a fit. There is usually some bewilderment and headache. The latter may precede the fit several days. occasionally the patient falls into some mental delusion. as - imagines that everything is broken, or a ghost has been just seen. to the fit. but there are rather numerous cases where patients fall down in the fit without any premonitory symptoms. the

motory

sensory

again have been known to scream at immediately before the convulsion and feel no pain or know why. This is so it is authored that during the attack no pain is felt as there is no recollection of suffering afterwards.

During the paroxysm the countenance becomes at first very pale or of a bluish red colour. There is foaming at the mouth rolling of the eye the pupils of which are generally dilated. The skin is relaxed. At a crisis the countenance is horribly convulsed pulse small and quick. respiration short deep and irregular. urine and semen often semen is involuntarily discharged. The neck and chest are usually much swollen. The hands are clenched and the heart palpitates strongly. The patient then falls into a deep sleep from which after some hours he awakes of tentimes without any recollection of what has occurred to him

From the fact that irritation produced in any part of the body and acting upon the brain will cause this disease it is not expected that we can always find lesions after death. Many cases are reported where there was undoubted epilepsy during life, and yet upon the closest inspection of the brain and spinal cord after death, nothing abnormal could be discovered. Of course when it has been caused by tumours or spicules of bone or injuries to the head the usual effects of inflamation are evident sometimes abscesses are found softening and induration. Thickening of the membranes and serous effusions. Cases are on record in which not the pineal gland and cerebellum were diseased. The medulla often contains small yellow bodies about the size of millet seed and tubercles in sphericals may these not be real tubercular deposits which have been the source of irritation. This irritation

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leading to inflammation and thus producing the same baneful effects that tumours. A number of some and other sources of intestinal worms of the authors whom I have consulted mention them but I should think they might be placed among the detecting causes. Children may be confounded with apoplexy. Convulsions of children caused by intestinal irritation and with intense pain may readily be distinguished from apoplexy if seen during the fit. The appearance of the face which is usually pale. The rigid contortion of the features and disgusting grimaces and convulsions, absence of strictures, rattling and gurgling of paralysis will point out the nature of the disease. But if seen during the comatose condition it will be more difficult to distinguish them from each other. The smallness of the pulse, short duration of the fit, and the previous history of the case will enable us to obtain a just conclusion.

Epilepsy

children are often attacked with convulsions that simulate epileptic fits. a case came under my notice while in Virginia last summer. The child had been in delicate health from birth. was in a very anemic condition and had had frequent convulsions prior to which violent headache erection of the penis and other symptoms of epilepsy had been observed and in fact the attendant physician had diagnosed it such. Being connected with the family I was called in to see it, and found that intestinal irritation was a frequent cause of this cerebral disturbance. "as of course did the physician in attendance" I studied him closely both during and after the fit and noticed that his mind was unimpaired in the interval. and also that there was left frothing at the mouth & left stiffness of rectus during the fit. That we see in epilepsy I recommended antiseptics, tonics & the warm bath. The child has had

no convulsions since and his general health is much improved

Epilepsy and Hysteria have many symptoms in common. a correct diagnosis is very important as one is a curable the other unfortunately very often an incurable disease. In the former disease there is the turgid flushed face so different from the livid countenance of the epileptic. again we have that peculiar hysterical laugh which is heard in no other disease. There is no distortion of the face, foaming at the mouth, permanent dilation & contraction of the pupils nor is there that profound coma which always follows the epileptic fit. sometimes the two diseases coexist. In the diagnosis is rendered extremely difficult and it requires sound judgment & close observation to discriminate between the two. The symptoms of both diseases are intimately connected. Congenital Epilepsy is seldom or never cured. in fact the disease is one of

the most intractible which the physician has to contend with. if we can discover the cause and remove it. such for instance as a spicula of bone. intestinal irritation. stone in the bladder &c then will our prognosis be favourable but unfortunately for us the cause is often found but cannot be removed. then is our unhappy patient doomed to a life of misery. his intellect gradually fading away until he becomes either a raving maniac or a drivelling idiot a burden to himself & all around him In treating Epilepsy we have several indications to fulfil first to prevent the attack. then to mitigate the inflicting during the paroxism and finally to eradicate the cause of it. If there should be an aura Epileptica the fit may be averted by placing a ligature around the limb but the cases in which this phenomena is observed are rare. during the convulsion all that can be done is to elevate the

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head. Protect the mouth from being injured and give the patient plenty of air. Should there be any tendency to exhaustion bleed. During the interval all exciting causes must be removed if practicable and treatment during this period is purely empirical. Many remedies commonly called specifics have been proposed but common sense should teach us that there are no specifics for a disease which at its inception and most of the time yet has so many causes affected and in so many different modes.
We must adapt our remedies to the various constitutional habit and functional disorders of the patient and it must depend upon hygienic and medical and continued for a long time. Direct attention must be paid to diet. He must abstain from all stimulating food and drink. If he should be plethoric venesection bleeding are indicated. If there be fixed pain that disturbs sleep irritation

to the muscular tissues. setons & small blisters down the spine are useful. Chronic eczemia exist tonics especially the chloride of iron & aloes are useful with the liquid extract. and occasionally to keep the bowels open among the so called specifics may be mentioned first in order nitrate of silver given in small doses at first and gradually increased. The great objection to this drug, is the discoloration of the skin which it produces. and the fact it should never be used except in small colored persons. it has a tendency to produce gastritis which we should always bear in mind during its administration. The preparations of copper have been considered by many equal in not superior to the nitrate of silver. Iron. acetate of lead and sulphate of zinc have been used with good effect. The Valerianate of Zinc has been given in the Baltimore infirmary but I have seen no good accrue from it

oil of Turpentine has been much used in England and at one time was in high repute but it has now gone out of use
Nitric Camphor and the Ferrs have all been used with some success
As I before mentioned the Cotyledon umbilicus is reported to have effected several cures; but none that I can recollect where the disease was idiopathic. The preparations of iodine are also mentioned among the remedies in this disease. Valerian, Musk Asafetida and Camphor have also been used. A late year, indigo has acquired some reputation in the cure of this disease. We may also mention among the remedies used in olden time but now entirely out of use. The mistletoe, the root of the fern, Wormwood, Thoroughwort Electricity and Galvanism have also been recommended. Ebers states that Music has been employed to assume this [illegible] reality —

of late years digitalis has been much used and notwithstanding some success several cases have been cited where it produced a radical cure. I should think it was best adapted where a sedative influence upon the heart was required. Conversing some time since with an old practitioner he informed me that he had repeatedly cured the disease by ligating the common carotid arteries thus preventing congestion and arrival of blood to the brain. But I should think where the cause was essential it could do little or no good. Should there be a predisposition it might produce the desired effect as I remarked in the beginning of this imperfect sketch our efforts to cure this terrible disease are often very often futile and all we can do is to alleviate the sufferings of the unhappy beings upon whom the Almighty has placed his scourge.

FINIS

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